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IN THIS ISSUE

Thomas G. Lammers leads off this issue with an excursion into botanical history, in this case an investigation of the life and work of Nathan Coleman, a little-known botanist who published a catalogue of the plants of Michigan's Lower Peninsula in 1874. The little that had previously been known was encompassed in a single paragraph in Edward G. Voss's comprehensive historical study, *Botanical Beachcombers and Explorers: Pioneers of the 19th Century in the Upper Great Lakes*, published in 1978. Dr. Lammers provides a wealth of detail to flesh out this very interesting life.

Floyd Swink authored the well-known and comprehensive *Plants of the Chicago Region*, which encompassed four editions between 1969 and 1994 and covered 22 counties in four states at the southern end of Lake Michigan. Now, after 23 years of very active taxonomic and nomenclatural changes and field exploration, Gerould Wilhelm, who joined Swink as coauthor in the last two editions, in turn joins with Laura Rericha to produce a greatly expanded *Flora of the Chicago Region: a Floristic and Ecological Synthesis*, covering the same 22 counties, which is expected to be published early in 2017. In preparation for that volume, they are publishing here the formal description of a new species and 22 new combinations that will appear in the new flora.

The third article, by Neil Harriman, is a short exercise in a technical but important area of botanical nomenclature, establishing the sequence and publication dates of the 20 elements that constitute an important early publication on fern taxonomy.

Two noteworthy collections articles by very active field botanists in the Great Lakes area report the first record of *Hypericum adpressum* in Michigan and the rediscovery of *Mimulus alatus* in the same state. A review by Larry Noodén of *Field Guide to the Natural Communities of Michigan* follows, which complements another review of the same book in the previous issue of *The Michigan Botanist*.

Among the announcements at the end of this issue is a notice that this journal will change its name to *The Great Lakes Botanist* at the beginning of 2017 and expand its geographical coverage to all of North America north of Mexico.

——Michael Huft

NATHAN COLEMAN, MICHIGAN'S MYSTERY BOTANIST

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ABSTRACT

Rev. Nathan Coleman (1825–1887) produced a catalogue of Michigan's flora in 1874 under the auspices of the Kent Scientific Institute in Grand Rapids. In this work, he validly published 31 new varieties and four new species from Michigan and effected two new combinations at varietal rank. Because little is known of his life and work, Internet searches of nineteenth century newspapers, periodicals, and books were undertaken to discover additional biographical data. Coleman spent most of his career as a teacher. This included basic education for former slaves in Virginia during the Civil War, employment at a public grammar school in Grand Rapids, founding a private high school in Iowa, and serving on the faculty of an African-American college in Texas. His botanical output, aside from the 1874 Michigan catalogue, comprised a series of short notes in *Botanical Gazette* during 1876-1878, most of which dealt with "variations" (as he termed them) observed in Connecticut and Iowa. He also provided specimens to other botanists, including Alphonso Wood and James Nathaniel Bishop.

KEYWORDS: Botanical history, botanical nomenclature, Alfred Oscar Coffin, Nathan Coleman, Freedmen's Aid Society, Grand Rapids Public Museum, Kent Scientific Institute, Wiley College, Alphonso Wood.

INTRODUCTION

The earliest efforts to compile a catalogue of Michigan's flora were undertaken by the state government, specifically the state geological surveys. During the initial survey of 1837–1845, Wright (1839) published a list of the plants of the Lower Peninsula (McVaugh 1970); a second survey in 1859–1862 added to the list (Winchell 1861). A dozen years later, another list was produced, this time under the auspices of a private organization. In this list, Coleman (1874) added another 275 species and varieties to the Winchell list, nearly three dozen of which were named and described as new by him.

The author of this last list is something of a mystery (Voss 1978). Nathan Coleman seems to have appeared out of the ether just long enough to produce his catalogue, and then disappeared again. Compared to other pioneer Michigan botanists (e.g., Capt. David Bates Douglass, 1790–1849; Dr. Zina Pitcher, 1797–1872; Dr. Douglass Houghton, 1809–1845; Dr. John Wright, 1811–1845), virtually nothing is known of Coleman's life and work. General biographical compilations (e.g., Drake 1872, Wilson and Fiske 1900, Goodrich 1928) do not mention him, and even the botanical ones (Barnhart 1965, Stafleu and Cowan 1976) give him short shrift. The objective of this study was to learn more about

this mysterious botanist in order to better understand this seminal piece of botanical work.

METHODS

Over the past decade, a wealth of nineteenth century newspapers, periodicals, and books have been digitized and made available to researchers via the Internet. Information scattered throughout the world's libraries and once all but impossible to locate may now be seen with but a few keystrokes while seated at one's desk. I have previously utilized this marvel of electronic engineering to excavate biographical information for other poorly known Midwestern botanists, including Dr. John Henry Rauch (Lammers 2013, in press a), Dr. Moses Cousins, Jr. (Lammers, in press b), and Dr. Edwin James in the years after the Long expedition (Lammers 2016).

The case of Nathan Coleman presents a special challenge. First, he resided in Michigan for only a short period. In contrast to a life-long resident of a locale, he had few opportunities to appear in the local press of the day. Information must therefore be sought on a national basis. Second, a number of other gentlemen of some prominence in that era were named "Nathan Coleman" or "N. Coleman." Thus, one must be certain that a particular datum actually refers to the author of the 1874 catalogue of Michigan plants and not to some homonymous contemporary.

For these reasons, Coleman's biography will be presented here in an unorthodox fashion. Rather than the chronological or thematic approach commonly employed, I will begin with his time in Michigan and trace his life both forward and back from there. In this way, we can connect the metaphorical dots with confidence and avoid the embarrassment of unfounded assumptions.

MICHIGAN YEARS

The starting point for our quest to learn more about Coleman is his one major botanical publication (Coleman 1874). This was issued as Miscellaneous Publication No. 2 of the Kent Scientific Institute and was that organization's "most extended and ambitious publication" (Strong 1918: 26). According to Coleman (1874: 3), he compiled the catalogue "at the earnest request of [the Institute's] members."

Kent Scientific Institute first took form on November 25, 1854 when a group of collections-based amateur naturalists organized the Grand Rapids Lyceum of Natural History. The Lyceum lapsed into inactivity during the Civil War (Strong 1918), but at war's end, several similarly inclined students at the West Side Union School formed the Grand Rapids Scientific Club (Garfield 1918). In January 1868, this student organization merged with the lapsed Lyceum, creating the Kent Scientific Institute (Anonymous 1868a). The avowed mission of the organization was "the increase and diffusion of scientific knowledge by a museum, library, lectures, the reading of original papers, and other suitable means" (Baxter 1891: 250; Goss 1906: 939).

The Institute entered into a mutually beneficial agreement with one of the local school districts (Strong 1918). The Institute was allocated space for its museum and library at the new Central School, located on Lyon Street between Barclay and Ransom Avenues (Anonymous 1873a, 1874). In return, the Institute's specimens and books would be available to faculty and students for use in their courses. Over the years, Kent Scientific Institute developed into the Grand Rapids Public Museum of today (Claus 2012).

Coleman's catalogue was dedicated to A. L. Chubb, "one of the patrons of the Kent Scientific Institute" (Coleman 1874: 2). Archibald Lamont Chubb (1830–1887) was a manufacturer of agricultural implements, President of the Grand Rapids Board of Education from 1871 to 1874, and one of the founding members of Kent Scientific Institute (Baxter 1891). Reading between the lines, one might postulate that it was Chubb who made the "earnest request" for a catalogue of Michigan plants.

Coleman (1874) used Winchell's (1861) earlier catalogue as the basis for his own, following its arrangement and adding 275 taxa to it. Among these were almost three dozen taxa that Coleman named and described as new, most at varietal rank (*see below*).

In the introduction, Coleman (1874: 3) informed us that he "had only a few months in which to make observations and explorations." These few months apparently fell largely between August 31, 1872 (Coleman 1874: 22) and October 25, 1873 (Coleman 1874: 36), the only two collection dates mentioned in the catalogue. Most of his field study was conducted in Kent County, where Grand Rapids lies, "though a little observation was made in Allegan and Kalamazoo Counties" (Coleman 1874: 3). Those taxa to which he had "given personal attention" during this period were denoted in the catalogue with an asterisk.

Whether Coleman's "personal attention" included the preparation of voucher specimens is not clear. Baxter (1891: 250) stated that the Institute's herbarium contained "some 725 species of plants, collected by N. Coleman, a former member," a claim paraphrased by Goss (1906: 941). However, 725 is the total number of species in Coleman's catalogue, a coincidence that suggests a faulty assumption. The Institute did have an herbarium, the existence of which apparently preceded Coleman's work: "Plant collecting was begun very early and continued vigorously in the early years of the Institute. The herbarium became extensive—almost complete for the flowering plants of the region—and was much used for reference" (Strong 1918: 25). This herbarium today resides at the University of Michigan (MICH). No specimens collected by Coleman are found there, not even the type material of his new taxa (Voss 1978). It is quite possible none were prepared.

This is all the information on Coleman that can be gleaned from his catalogue. In fact, from that source, we do not even know his first name. The title page and introduction both were signed simply "N. Coleman," and he was identified in the same fashion in the directory of botanists published by the Torrey Botanical Club (Anonymous 1873b). Contemporary city directories (Anonymous 1873a, 1874) listed but one N. Coleman in Grand Rapids: Nathan Coleman, a teacher in the grammar division at Central School. Note that it was this building that housed the Kent Scientific Institute and that the president of the Board of Education was one of its founding members (*see above*). As noted by Voss (1978), Coleman's name appeared in only the 1873 and 1874 city directories, which (in light of his occupation) suggests that he lived in Grand Rapids for little more than the 1872–1873 and 1873–1874 school years.

NEXT STOP: CONNECTICUT

An 1876 update of the Torrey Botanical Club's directory of botanists showed Coleman residing in Bloomfield, Connecticut, and noted, "*Removed from Mich.*" (Anonymous 1876: 3). In the years that followed, his name was mentioned occasionally in floristic accounts for Connecticut. For example, the Berzelius Society (1878) and Graves et al. (1910) each cited a few Coleman specimens, and Bishop (1885: 3) acknowledged "Nathan Coleman, Esq., Berlin" for information. In a series of brief notes in the *Botanical Gazette* (denominated *Botanical Bulletin* in its first volume), Coleman during 1876-1877 gave his residence as Bloomfield, and in 1878 as Berlin. These two towns are both situated in Hartford County, the former northwest of the city of Hartford, the latter southwest of it.

The first of these articles (Coleman 1876a, 1876b) appeared in the September 1876 issue, and a third appeared in December 1876 (Coleman 1876c). Of interest in the last is his comment that, "in 1872–3–4, I very frequently found *Polygonum amphibium* with salver form stipules . . . I also found *P. Careyi* with salver form stipules." Although he did not give localities for this observation, the indicated span of years is exactly that for which we can document his residence in Michigan. Furthermore, these were two of the variants he had named and described in his Michigan catalogue (Coleman 1874: 32–33), although in this paper he did not use the names he had given them in the catalogue. Additional connections to his Michigan catalogue in the March 1877 issue (Coleman 1877a) included plants of *Ranunculus purshii* Richardson around Grand Rapids with doubled flowers (cf. Coleman 1877a: 90, Coleman 1874: 5); a late-fruiting *Salix* (cf. Coleman 1877a: 91, Coleman 1874: 36); pubescent *Arctostaphylos uva-ursi* (L.) Spreng. (cf. Coleman 1874: 25, Coleman 1877a: 91); and two species of *Liatris* seen at Grand Rapids in 1873–1874 (cf. Coleman 1874: 19, Coleman 1877a: 90).

Coleman was still living in Berlin on June 16, 1880, when his household was recorded in the tenth national census (Bureau of the Census 1880). From this source we learn that he was engaged there in farming, that he was 54 years old, that he was born in Massachusetts, and that he was married. His wife Sarah, born in Connecticut, was also 54 years old.

As it turns out, Sarah Coleman belonged to a family of some prominence. From published genealogies of its various branches (Dwight 1871, 1874; Hoagland 1990), we learn that Sarah Childs Clark was born on November 16, 1825 in Seymour, Connecticut, a town in New Haven County about 40 miles southwest of Hartford. The couple wed on November 24, 1859 and had no children. As for Nathan Coleman, these sources indicated that he was born on August 13, 1825 in Cheshire, Massachusetts, the son of Rufus and Wealthy (*née* Russell) Coleman. At the time the information was gathered for the first of these (Dwight 1871), he was a teacher in Albia, Iowa.

THE IOWA YEARS

On August 23, 1870, Nathan and Sarah Coleman were enrolled in the ninth national census at their home in Albia, Iowa, the seat of Monroe County (Bureau of the Census 1870). He was then 45 years old, listed as a native of Massachusetts, and a teacher; she was 44 years old and a native of Connecticut. Her brother, John Clark, and their uncle, Wareham Grant Clark, also lived in Albia (Dwight 1871, Hoagland 1990), where they achieved considerable prominence in local affairs (Anonymous 1878, Hickenlooper 1896). A widowed aunt, Rosella Clark Bailey, also resided there (Dwight 1871).

In one of the botanical articles that Coleman penned while living in Connecticut (Coleman 1876c), he mentioned in passing a "form of *Polygonum*, very frequent in southern Iowa." His botanical work in the latter state was discussed more fully in a subsequent pair of articles.

In the first of these articles, Coleman stated that his observations in Iowa were made "for the most part in July and August, 1873" (Coleman 1877b). Note that this was during the period he was living in Michigan. Localities mentioned were Albia (Monroe County), Chariton (Lucas County), and Moulton and Unionville (both Appanoose County). As he did in previous notes, he mentioned several of the "variations" that he had named and described in his Michigan catalogue, though once again he did not call them by the names he coined there. These included a roseate form of *Verbena hastata* L. (cf. Coleman 1874: 28, Coleman 1877b: 106), a distinctive *Rudbeckia* (cf. Coleman 1874: 22, Coleman 1877b: 106); and *Quercus macrocarpa* Michx. with corky-winged twigs (cf. Coleman 1874: 34, Coleman 1877b: 106).

The second note (Coleman 1877c) was written in response to an earlier article in which Burgess (1877) reported a number of recent additions to Arthur's (1876) catalogue of Iowa plants. Coleman, seeming miffed, asserted that in fact he himself had collected most of these in Iowa as early as 1867–1869. He went on to declare that during the 1873 collecting efforts mentioned in the previous article (here said to have taken place during his "summer vacation"), he "sent nearly three hundred names of species and varieties, not then catalogued, to the State Botanist, many of them seen for the first time in Iowa, that summer" (Coleman 1877c).

I can only assume that by "State Botanist," Coleman meant Prof. Charles Edwin Bessey (1845–1915) at Iowa Agricultural College (now Iowa State University), and that "not then catalogued" meant species not in Bessey's (1871) checklist of Iowa plants. Joseph Charles Arthur (1850-1942) was Bessey's student at Iowa Agricultural College (Cummins 1978). His catalogue of Iowa plants (Arthur 1876)—prepared in conjunction with the state's exhibit at the Centennial International Exhibition in Philadelphia—was an avowed expansion of Bessey's earlier list. Addenda sent to Bessey would indeed have been turned over to Arthur for inclusion. The omission of the names sent by Coleman in 1873 likely was due to Arthur's aversion to listing taxa not substantiated by voucher specimens (cf. Arthur 1878).

Coleman also communicated some of his 1867–1869 botanical results from

Iowa to Alphonso Wood (1810–1881). Among contributors acknowledged in *The American Botanist and Florist* for "new and rare plants, and for valuable information concerning them," Wood (1870: 2) mentioned "N. Colman [*sic*], Iowa." Fifteen taxa were cited from Iowa in that work, eleven of which were carried over from his earlier work, *Class-book of Botany* (Wood 1861). Of the four new reports, only one, *Rhamnus lanceolata* Pursh, was explicitly credited to Coleman (Wood 1870: 77). "Colman" also was credited for reporting that *Linaria cymbalaria* (L.) Mill. [≡ *Cymbalaria muralis* Gaertn., B. Mey. & Scherb.] was "naturalized in Iowa" (Wood 1881: 830).

Coleman's name appeared with some frequency in the Albia newspapers of that period. He was indeed a teacher there, but not in the public schools. Rather, he had opened a private high school, called the Albia Academy, on September 30, 1867 (Anonymous 1867a, 1867b, 1868b); the school's curriculum was intended particularly for "those designing to teach" (Anonymous 1867c). Coleman was lauded in the press as "a thorough and competent teacher [who] should be generously sustained in his praiseworthy efforts to establish a first class school" (Anonymous 1867c).

A year after his academy opened, Coleman presided over a week-long professional-development institute for the teachers of Monroe County (Coleman and Mark 1868, Spectator 1868). Sessions on geography, orthography, arithmetic, reading, and "Teaching the Alphabet" were conducted by him personally, and one evening he delivered a lecture on physiology.

In addition to his educational activities, Coleman served on the committee that arranged the town's Fourth of July festivities in 1868 (Anonymous 1868c), delivered a temperance lecture at the First Presbyterian Church on September 1, 1868 (Anonymous 1868d), and represented Troy Township at the Republican Convention on August 14, 1869 (Richey & Robb 1869).

Coleman was styled "Reverend" in some sources (e.g., Anonymous 1867b, 1868b, 1868d; Coleman and Mark 1868; Dwight 1871, 1874). This referred to his status as a deacon in the Methodist Episcopal Church (a forerunner of today's United Methodist Church). The Iowa Conference of that denomination met in Ottumwa during September 18–23, 1867 (Anonymous 1867d), with Bishop Levi Scott, D.D. (1802–1882) presiding (Mitchell 1885). At this convocation, Coleman was one of six men who "were represented and elected to deacon's orders" (Anonymous 1867e).

It is of considerable interest that Coleman was not the only botanist residing in Albia in those years. Dr. Moses Cousins, Jr. (1827–1868) lived there from 1850 until his death (Lammers 2013, in press b). Cousins had sent Alphonso Wood the plants of Iowa that were included in the latter's *Class-book* (Wood 1861), and it may have been at his suggestion that Coleman did the same. The two men must have been acquainted, as both were members of the Monroe County Agricultural Society. At that group's October 1868 fair (Anonymous 1868e), Cousins served with Coleman's brother-in-law, W. G. Clark (*see above*) as a judge of "seeds and vegetales [*sic*]," and Coleman was a judge of fruits with Cousins' father, Moses Kellogg Cousins (1804–1888). Coleman's interest in vegetable gardening is reflected in a newspaper ad (Coleman 1868) offering for sale plants of Sweet Potato 'Yellow Nansemond' (Starnes 1894).

THE FIRST FORTY YEARS

Beyond Coleman's birth and marriage (*see above*), the first forty years of his life are a total mystery. He was presumably one of the two white males under the age of five living in the home of Rufus Coleman at the time of the fifth decennial census (Bureau of the Census 1830). Ten years later, only one child under the age of 15 remained in the house (Bureau of the Census 1840). Whether this was Coleman or his brother is not known, as only heads of households were recorded by name at that time. I could not locate Coleman or his parents in the 1850 and 1860 censuses.

Nothing is known of Coleman's education, nor of how he became interested in botany. As for his occupation in those years, it appears to have primarily involved teaching. When he opened Albia Academy, local newspapers described him as "a teacher of long experience, a thorough schollar [*sic*], and well recommended from the east" (Anonymous 1867a). He was a "teacher of long experience in the best schools and academies of the east" (Anonymous 1867c) and had "an experience of more than twenty years in teaching" (Anonymous 1868b). The schools and towns at which he taught are not known.

FINAL YEARS IN TEXAS

Wiley University (known today as Wiley College) was established in Marshall, Texas, in 1873. This institution was an effort by the Methodist Episcopal Church to educate the recently emancipated (Culver 1887, Brooks and Starks 2011). The Professor of Mathematics and Natural Science at Wiley was "N. Coleman" (Anonymous 1884, 1886; Webb 1884, 1885, 1887a), "a zealous and truly reliable teacher" (Webb 1886) who first joined the faculty of five men and women in the fall of 1883 (Webb 1887b).

We are able to equate this Texas gentleman with the botanical Nathan Coleman of Michigan, Connecticut, and Iowa via his obituaries (Webb 1887b, 1887c). These said nothing of his time in those three states or of his botanical interests, but they did state that he was born on August 13, 1825 in Cheshire, Massachusetts, and that he was ordained a deacon in September 1867 by Bishop Scott (*see above*).

The President of Wiley University, Rev. Nathaneal D. Clifford (1854–1887), died on March 10, 1887 (Webb 1887d). Even though his wife Cora Knight Clifford was appointed acting president for the remainder of the term (Anonymous 1887), the small faculty's workload nevertheless increased markedly. When the academic year ended on June 2, an exhausted Coleman "took to his bed . . . and never rallied" (Webb 1887b, 1887c). He succumbed to typhoid fever on June 21, 1887 and was buried in Greenwood Cemetery in Marshall (Webb 1887a). He was survived by his wife.

Coleman evidently retained his botanical interests after moving to Texas. At the 1900 *Exposition Universelle* in Paris, Booker T. Washington (1856–1915) and W. E. B. Du Bois (1868–1963) organized the *Exposition Nègres d'Amerique*

to highlight positive societal contributions by African-Americans. Part of the exhibit was "Books and Pamphlets by Negro Authors." The catalog for this exhibit (Murray 1900) included an entry for an undated work entitled "Coleman, N. and Coffin, A. O., Native Plants of Marshall, Texas."

Coleman's co-author was Alfred Oscar Coffin (1861–1933), the first African-American to hold a doctorate in the biological sciences. After earning his Ph.D. from Illinois Wesleyan University in 1889, he became Professor of Mathematics and Modern Languages at Wiley University (Mather 1915, Greene 1946). Because Coffin did not arrive at Wiley until after Coleman's death, one suspects this was a post-mortem collaboration, a manuscript that Coleman left unfinished, which Coffin brought to fruition. In fact, it may only have been a manuscript and never effectively published; the exhibit catalog (Murray 1900) gave no place or date of publication for the work.

Although Coleman and Coffin did not overlap at Wiley, there is a slight possibility they had met earlier. Coffin was born in Pontotoc, Mississippi. In one of his botanical papers, Coleman (1877b: 106) mentioned two plants found "in one locality in Mississippi near Pontotoc." He gave no time frame, and it was the only time he alluded to botanical work outside Michigan, Connecticut, and Iowa. Had the two met in Pontotoc, Coffin would have been 16 years of age or younger.

THE CIVIL WAR

The obituaries by Webb (1887a, 1887b) provide one final bit of biographical information not documented elsewhere. Here it was stated that Coleman "entered the services of the Freedmen's Bureau in 1863, taught in Norfolk, Va., and on the fortifications near Petersburg."

The phrase "Freedmen's Bureau" usually denotes the Bureau of Refugees, Freedmen and Abandoned Lands within the Department of War. However, that agency was not established by Congress until March 3, 1865 (*13 Stat. 507*). Given Coleman's affiliation with the Methodist Episcopal Church, his eulogist likely meant that he had belonged to the Freedmen's Aid Society, a private agency within that denomination (Beard 1909, Boone 1909). During the Civil War, this society opened and operated schools for former slaves in areas occupied by federal military forces. Norfolk, Virginia, fell under federal control in May 1862 and became the initial locus from which these efforts spread (Richardson 1986). Petersburg, Virginia, was the site of prolonged trench warfare between federal and secessionist forces during 1864–1865, and, again, schools were established there for freedmen (Field 2009).

Thus it seems likely that at least part of Coleman's experience in education prior to coming to Iowa (*see above*) involved teaching the recently emancipated to read and write. Perhaps Coleman's experience with plants at Pontotuc, Mississippi, (*see above*) came about in this connection. In 1866, the Freedmen's Aid Society established Rust University (today known as Rust College) in Holly Springs, just 60 miles from Pontotoc. It was at Rust that A. O. Coffin (*see above*) received his college preparatory education (Mather 1915, Greene 1946).

BIOGRAPHICAL SUMMARY

Nathan Coleman was born on August 13, 1825 in Cheshire, Massachusetts, to Rufus and Wealthy (*née* Russell) Coleman. On November 24, 1859, he married Sarah Childs Clark of Seymour, Connecticut. He was a teacher by vocation and during the Civil War taught former slaves to read and write at schools operated in Norfolk and Petersburg, Virginia by the Freedmen's Aid Society of the Methodist Episcopal Church.

By August 1867, he was in Albia, Iowa, where his wife had relatives. Here he opened a private high school, the Albia Academy. He was ordained a deacon of the Methodist Episcopal Church by Bishop Levi Scott at the September 1867 meeting of the Iowa Conference in Ottumwa and was active in civic affairs, including the county agricultural society and a county-wide teachers' institute. During this period, he provided information on Iowa plants to Alphonso Wood. He was still in Albia as late as August 1870.

During the 1872–73 and 1873–74 school years, Coleman taught at the Central Grammar School in Grand Rapids, Michigan. He spent the intervening summer vacation back in Iowa. At the behest of the Kent Scientific Institute, he compiled a catalogue of the plants of Michigan. From 1876 to 1880, he was a farmer in Hartford County, Connecticut, some 40 miles from his wife's hometown. For the academic years 1883 through 1887, he was Professor of Mathematics and Natural Science at Wiley University, a school for African-Americans founded by the Methodist Episcopal Church in Marshall, Texas. There he died of typhoid fever on June 21, 1887. He is buried in Greenwood Cemetery in Marshall.

BOTANICAL LEGACY

The corpus of Coleman's botanical work consists of his catalogue of Michigan plants (Coleman 1874) plus seven brief notes in the *Botanical Gazette* (Coleman 1876a, 1876b, 1876c, 1877a, 1877b, 1877c, 1878). The last of these addressed seed-sources in ecological succession: soil seedbank vs. colonization from outside areas. The other six were concerned with "variations." As used by Coleman, the term meant plants that failed to conform in some fashion to their published descriptions. Some of these may have had a genetic basis, while others may have been mere developmental aberrations or environmentally induced anomalies.

Coleman named and/or described many "remarkable variations" (Coleman 1874: 3) in his Michigan catalogue. I say "and/or" because sometimes he provided a name but no validating diagnosis, e.g., "Menispermum canadense var. lobatum" (Coleman 1874: 6). Other times he gave a serviceable diagnosis but no epithet, e.g., "a variety of this has membranous, purple-edged, glandular pubescent scales" under *Aster macrophyllus* L. (Coleman 1874: 19). In 31 cases, however, Coleman provided both epithet *and* diagnosis, thereby validly publishing a name. He also described four species as new. As noted by Voss (1978), type specimens are not extant for any of these 35 novelties. Because

most have been overlooked by taxonomists and indexers through the years, all valid names published by Nathan Coleman are listed here, including two new combinations he made at varietal rank. The taxon to which each name most likely belongs is suggested. In the absence of type specimens, these identifications must be regarded as speculative, particularly those to which a question mark is appended.

Anacharis canadensis var. *rosea* N. Coleman, Cat. Fl. Pl. Mich.: 38 (1874).— Diagnosis: "resembling the [typical variety], but the flowers beautifully rose-colored." = **Elodea canadensis** Michx.

Aster novi-belgii var. *prœaltus* (Poir.) N. Coleman, Cat. Fl. Pl. Mich.: 20 (1874).— Basionym: *Aster prœaltus* Poir., Encycl., Suppl. 1: 493 (1811). ≡ **Symphyotrichum prœaltum** (Poir.) G. L. Nesom.

Campanula rotundifolia var. *dentata* N. Coleman, Cat. Fl. Pl. Mich.: 24 (1874).— Diagnosis: "Stem lvs. narrow to broad lanceolate, sinuate dentate." = **Campanula intercedens** Witasek. [*C. rotundifolia* of American authors, not L.].

Cenchrus tribuloides var. *multiflorus* N. Coleman, Cat. Fl. Pl. Mich.: 47 (1874), as 'multiflora.'— Diagnosis: "Stem purple, florets 18 to 30." = **Cenchrus longispinus** (Hack.) Fern.

Chelone glabra var. *linifolia* N. Coleman, Cat. Fl. Pl. Mich.: 23 (1874).— Diagnosis: "Leaves long, linear, sparingly toothed, ¼ to of an inch wide." ≡ **Chelone glabra** subsp. **linifolia** (N. Coleman) Pennell.

Cirsium lanceolatum var. *album* N. Coleman, Cat. Fl. Pl. Mich.: 23 (1874).— Diagnosis: "Pure white; not common." = **Cirsium vulgare** (Savi) Ten.

Equisetum arenarium N. Coleman, Cat. Fl. Pl. Mich.: 47 (1874), as 'arenaria.'— Diagnosis: "Stem slender, usually simple, sometimes irregularly branched at base, 13 to 18 furrowed, sheaths green with a white margin, teeth often marked with brown, stem 10 to 24 in. high, growing in sandy soil near Grand Rapids." = **Equisetum ´mackaii** (Newman) Brichan?

Equisetum lacustre N. Coleman, Cat. Fl. Pl. Mich.: 47 (1874), as 'lacustris.'— Diagnosis: "Stems 18 to 30 inches high, irregularly branching at base – branches few; generally about 15 furrowed; sheath green tipped with black teeth. Found growing in Reed's Lake." The following comment pertains to both this and the preceding: "These are so unlike any described species in form and habit, that after watching them for two years, I considered them species instead of varieties." = **Equisetum fluviatile** L.?

Euphorbia pilosa N. Coleman, Cat. Fl. Pl. Mich.: 33 (1874), nom. illeg. sub Art. 53. Non *Euphorbia pilosa* L., Sp. Pl.: 460 (1753).— Diagnosis: "A n. sp. or a very marked variety. Leaves scattered, entire, revolute on the margin, very hairy, as well as the stem." = **Euphorbia commutata** Engelm.?

Fagus sylvatica var. *ferruginea* (Dryand.) N. Coleman, Cat. Fl. Pl. Mich.: 35 (1874).—Basionym: *Fagus ferruginea* Dryand., Hort. Kew. 3: 362 (1789). = **Fagus grandifolia** Ehrh.

Galium boreale var. *roseum* N. Coleman, Cat. Fl. Pl. Mich.: 18 (1874).— Diagnosis: "quite small, with rose colored petals." = **Galium boreale** L.

Geranium maculatum var. *parviflorum* N. Coleman, Cat. Fl. Pl. Mich.: 10 (1874), as 'parviflora.'— Diagnosis: "occurs frequently, flowers quite small." = **Geranium maculatum** L.

Hypericum mutilum var. *minimum* N. Coleman, Cat. Fl. Pl. Mich.: 9 (1874).— Diagnosis: "Stem three to six inches high, lvs. three nerved – Grows near Grand Rapids." = **Hypericum mutilum** L.

Krigia virginica var. *pilosa* N. Coleman, Cat. Fl. Pl. Mich.: 23 (1874).— Diagnosis: "About the size of the [typical variety]; quite hairy, and branched." = **Krigia virginica** (L.) Willd.

Lithospermum lutescens N. Coleman, Cat. Fl. Pl. Mich.: 29 (1874).— Diagnosis: "Leaves large, ovate, lanceolate, nearly sessile, rough on the upper side; fls. yellow, larger than in *L. arvense;* seeds white, sometimes two – generally but one; st. from 1½ to 3½ ft. high." = **Lithospermum latifolium** Michx.

Lobelia cardinalis var. *glandulosa* N. Coleman, Cat. Fl. Pl. Mich.: 24 (1874).— Diagnosis: "lvs. glandular serrate, calyx lobes auriculata [*sic*]." = **Lobelia cardinalis** L.

Lobelia siphilitica var. *rosea* N. Coleman, Cat. Fl. Pl. Mich.: 24 (1874).— Diagnosis: "with leaves large and smooth." = **Lobelia siphilitica** L.

Mentha arvensis var. *aquatica* N. Coleman, Cat. Fl. Pl. Mich.: 27 (1874).— Diagnosis: "Coarser than *M. arvensis,* more hirsute, and growing in the water." = **Mentha canadensis** L.

Mentha canadensis var. *borealis* N. Coleman, Cat. Fl. Pl. Mich.: 27 (1874).— Diagnosis: "smoother than *M. canadensis*." = **Mentha canadensis** L.

Panax trifolius var. *roseus* N. Coleman, Cat. Fl. Pl. Mich.: 17 (1874), as 'rosea.'— Diagnosis: "A *P. trifolium,* flowers perfect, styles three, leaves smooth, and petals rose color; is often found growing with the other near Grand Rapids." = **Panax trifolius** L.

Parnassia caroliniana var. *cordifolia* N. Coleman, Cat. Fl. Pl. Mich.: 9 (1874).— Diagnosis: "Frequent near Grand Rapids – leaves distinctly heart shaped, sterile filaments only three in a set – sometimes with no leaf on the scape." = **Parnassia glauca** Raf.

Polygonatum giganteum var. *pubescens* N. Coleman, Cat. Fl. Pl. Mich.: 40 (1874).— Diagnosis: "Quite pubescent." = **Polygonatum pubescens** (Willd.) Pursh.

Polygonum amphibium var. *stipulaceum* N. Coleman, Cat. Fl. Pl. Mich.: 32 (1874).— Diagnosis: "with leaves and flowers like *P. amphibium;* the leaves, possibly a little narrower, and with salver form stipules, like *P. orientale,* found growing in sandy soil, near Gd. Rapids." ° **Persicaria amphibia** var. **stipulacea** (N. Coleman) H. Hara. Cf. Coleman (1876c).

Polygonum aviculare var. *gracile* N. Coleman, Cat. Fl. Pl. Mich.: 32 (1874), as 'gracilis.'— Diagnosis: "Very slender, erect, leaves linear." = **Polygonum aviculare** L.?

Polygonum careyi var. *punctatum* N. Coleman, Cat. Fl. Pl. Mich.: 33 (1874).— Diagnosis: "Leaves smooth, punctate." = **Persicaria careyi** (Olney) Greene.

Polygonum careyi var. *stipulaceum* N. Coleman, Cat. Fl. Pl. Mich.: 33 (1874).— Diagnosis: "With salver form stipules – presenting all stages of change from broad, salver form stipules to those merely truncate." = **Persicaria careyi** (Olney) Greene. Cf. Coleman (1876c).

Polygonum virginianum var. *maculatum* N. Coleman, Cat. Fl. Pl. Mich.: 33 (1874).— Diagnosis: "Resembles the [typical variety], but has a dark, triangular blotch on the leaves, which are very large." = **Persicaria virginiana** (L.) Gaertn.

Quercus macrocarpa var. *alata* N. Coleman, Cat. Fl. Pl. Mich.: 34 (1874).— Diagnosis: "Branches strongly cork-winged." = **Quercus macrocarpa** Michx. Cf. Coleman (1877b: 106).

Rudbeckia speciosa var. *glabra* N. Coleman, Cat. Fl. Pl. Mich.: 22. (1874).— Diagnosis: "In two localities near Grand Rapids. Plant very smooth except margin of leaves." = **Rudbeckia fulgida** Ait. var. **speciosa** (Wender.) Perdue. Cf. Coleman (1877b: 106).

Sagittaria graminea var. *elliptica* N. Coleman, Cat. Fl. Pl. Mich.: 38 (1874).— Diagnosis: "With lance elliptic leaves." = **Sagittaria graminea** Michx.

Schollera graminea var. *minima* N. Coleman, Cat. Fl. Pl. Mich.: 41 (1874).— Diagnosis: "Found growing in the mud near Gd. Haven. Stems 1½ to 2 inches high." = **Heteranthera dubia** (Jacq.) MacMill.

Sium latifolium var. *grandifolium* N. Coleman, Cat. Fl. Pl. Mich.: 17 (1874).— Diagnosis: "A variety occurs with very large leaves, which might well be called …" = **Sium suave** Walt.

Tofieldia glutinosa var. *longifolia* N. Coleman, Cat. Fl. Pl. Mich.: 40 (1874).— Diagnosis: "Leaves long and narrow." = **Triantha glutinosa** (Michx.) Baker.

Trillium grandiflorum var. *minimum* N. Coleman, Cat. Fl. Pl. Mich.: 40 (1874).— Diagnosis: "Very slender, growing with the [typical variety]; flowers white, petals narrow." = **Trillium grandiflorum** (Michx.) Salisb.

Verbena hastata var. *rosea* N. Coleman, Cat. Fl. Pl. Mich.: 28 (1874).— Diagnosis: "Fls. a beautiful rose color." = **Verbena hastata** L. Cf. Coleman (1877b: 106).

Veronica americana var. *hirsuta* N. Coleman, Cat. Fl. Pl. Mich.: 27 (1874).— Diagnosis: "Plant quite large, 24 to 30 inches high, very hirsute." = **Veronica scutellata** L.

Viola striata var. *lutescens* Alph. Wood ex N. Coleman, Cat. Fl. Pl. Mich.: 8 (1874).— Diagnosis: "(by suggestion of Prof. Wood). A new variety, near Grand Rapids: yellow with dark purple striæ." = **Viola striata** Ait.

LITERATURE CITED

Anonymous. (1867a). Temperance and schools. *The Weekly Albia* (Iowa) *Union* (August 22): 3.
Anonymous. (1867b). Albia Academy. *The Weekly Albia* (Iowa) *Union* (December 12): 3.
Anonymous. (1867c). Albia Academy. *The Weekly Albia* (Iowa) *Union* (September 19): 3.
Anonymous. (1867d). Minutes of the annual conferences of the Methodist Episcopal Church for the year 1866. Carlton & Porter, New York, N.Y.
Anonymous. (1867e). Southern Iowa Conference. *Burlington* (Iowa) *Daily Hawk-Eye* (September 22 1867): 1.
Anonymous. (1868a). Directory for 1668–9 [*sic*], of the city of Grand Rapids. Dudley & Goldsmith, Grand Rapids, Michigan.
Anonymous. (1868b). The Albia Academy. *The Weekly Albia* (Iowa) *Union* (January 9): 2; *The Weekly Albia* (Iowa) *Union* (January 16): 4.
Anonymous. (1868c). Arrangements for the Fourth of July. *The Weekly Albia* (Iowa) *Union* (June 18): 3.
Anonymous. (1868d). *The Weekly Albia* (Iowa) *Union* (August 20): 3.
Anonymous. (1868e). Premium list of the seventh annual fair of Monroe County Agricultural Society. *The Weekly Albia* (Iowa) *Union* (September 17): 1.
Anonymous. (1873a). Grand Rapids directory, 1873–74. Burch, Polk & Co., Detroit, Michigan.
Anonymous. (1873b). Botanical directory, for North America and the West Indies. Bulletin of the Torrey Botanical Club 4: 49–59.
Anonymous. (1874). Grand Rapids directory 1874–75. Polk, Murphy & Co., Detroit, Michigan.
Anonymous. (1876). Supplement to the botanical directory. 1876. Bulletin of the Torrey Botanical Club 6 (suppl.): 1–5.
Anonymous. (1878). The history of Monroe County, Iowa. Western Historical Co., Chicago, Illinois.
Anonymous. (1884). Editorial correspondence. *Southwestern Christian Advocate* (March 13): 4–5.

Anonymous. (1886). The seventeenth annual report of the Freedmen's Aid Society of the Methodist Episcopal Church. *Southern Workman and Hampton* (Virginia) *School Record* 15: 23.
Anonymous. (1887). Educational notes. (San Francisco) *Daily Bulletin Supplement* (June 11): 1.
Arthur, J. C. (1876). Contributions to the flora of Iowa; a catalogue of the phænogamous plants. Intelligencer Book Print, Charles City, Iowa.
Arthur, J. C. (1878). As regards the flora of Iowa. Botanical Gazette 3: 78.
Barnhart, J. H. (1965). Biographical notes upon botanists. G. K. Hall, Boston, Massachusetts.
Baxter, A. (1891). History of the city of Grand Rapids Michigan. Munsell & Co., New York, N.Y.
Beard, A. F. (1909). A crusade of brotherhood. A history of the American Missionary Association. The Pilgrim Press, Boston, Massachusetts.
Berzelius Society. (1878). A catalogue of the flowering plants and higher cryptogams growing without cultivation within thirty miles of Yale College. Tuttle, Morehouse & Taylor, New Haven, Connecticut.
Bessey, C. E. (1871). Contributions to the flora of Iowa. Pp. 90–127 in Fourth biennial report of the board of trustees of the Iowa State Agricultural College and Farm to the governor of Iowa. G. W. Edwards, Des Moines, Iowa.
Bishop, J. N. (1885). A catalogue of all phænogamous plants at present known to grow without cultivation in the state of Connecticut. Case, Lockwood & Brainard Co., Hartford, Connecticut.
Boone, R. G. (1909). Education in the United States. Its history from the earliest settlements. D. Appleton & Co., New York, N.Y.
Brooks, F. E., and G. L. Starks. (2011). Historically black colleges and universities. An encyclopedia. ABC-CLIO, Santa Barbara, California.
Bureau of the Census. (1830). Fifth census of the United States (NARA microfilm publication M19). National Archives, Washington, D.C.
Bureau of the Census. (1840). Sixth census of the United States (NARA microfilm publication M704). National Archives, Washington, D.C.
Bureau of the Census. (1870). Ninth census of the United States (NARA microfilm publication M593). National Archives, Washington, D.C.
Bureau of the Census. (1880). Tenth census of the United States (NARA microfilm publication T9). National Archives, Washington, D.C.
Burgess, R. (1877). Some Iowa plants. Botanical Gazette 2: 73–75.
Carman, C. W., J. N. Nind, and I. B. Gilbert. (1918). Historical. Pp. 14–15 in First annual report of the art and museum commissioners. Board of Art and Museum Commissioners, Grand Rapids, Michigan.
Claus, N. A. (2012). The Grand Rapids Public Museum: What's in a building? Grand Valley Journal of History 1(2): Article 2. Available at: http://scholarworks.gvsu.edu/gvjh/vol1/iss2/2 (Accessed October 21, 2016).
Coleman, N. (1868). [Advertisement.] *The Weekly Albia* (Iowa) *Union* (14 May): 3.
Coleman, N. (1874). Catalogue of flowering plants of the southern peninsula of Michigan, with a few of the Crytogamia [*sic*]. Kent Scientific Institute, Grand Rapids, Michigan.
Coleman, N. (1876a). *Plantago lanceolata,* L. Botanical Bulletin 1: 45.
Coleman, N. (1876b). A remarkable cherry tree. Botanical Bulletin 1: 45.
Coleman, N. (1876c). In: Miscellaneous notes. Botanical Gazette 2: 64.
Coleman, N. (1877a). Some notes on variations. Botanical Gazette 2: 90–91.
Coleman, N. (1877b). Some notes on variations in plants in Iowa. Botanical Gazette 2: 105–107.
Coleman, N. (1877c). Iowa plants. Botanical Gazette 2: 107.
Coleman, N. (1878). A few notes on the changes observed in vegetation. Botanical Gazette 3: 7.
Coleman, N., and E. Mark. (1868). Proceedings of teachers' institute. *The Albia* (Iowa) *Republic* (October 8): 2.
Culver, S. W. (1887). Colored schools in the Southwest. The American Magazine 6: 292–299.
Cummins, G. B. (1978). Arthur: The man and his work. Annual Review of Phytopathology 16: 19–30.
Drake, F. S. (1872). Dictionary of American biography, including men of the time. James R. Osgood & Co., Boston, Massachusetts.
Dwight, B. W. (1871). The history of the descendants of Elder John Strong, of Northampton, Mass., vol. 1. Joel Munsell, Albany, New York.

Dwight, B. W. (1874). The history of the descendants of John Dwight, of Dedham, Mass., vol. 1. John F. Trow & Sons, New York, N.Y.

Field, R. (2009). Petersburg 1864-65. The longest siege. Osprey Publishing, New York, N.Y.

Garfield, C. W. (1918). The Grand Rapids Scientific Club. Pp. 17–20 in First annual report of the art and museum commissioners. C. W. Carman, J. N. Nind, and I. B. Gilbert, editors. Board of Art and Museum Commissioners, Grand Rapids, Michigan.

Goss, D. (1906). Kent Scientific Institute. Pp. 938–944 in History of Grand Rapids and its industries, vol. 2. C. F. Cooper & Co., Chicago, Illinois.

Graves, C. B., E. H. Eames, C. H. Bissell, L. Andrews, E. B. Harger, and C. A. Weatherby. (1910). Catalogue of the flowering plants and ferns of Connecticut growing without cultivation. State Geological and Natural History Survey, Hartford, Connecticut.

Greene, H. W. (1946). Holders of doctorates among American Negroes. Meador Publishing Co., Boston, Massachusetts.

Hickenlooper, F. (1896). An illustrated history of Monroe County, Iowa. Privately published, Albia, Iowa.

Hoagland, L. W. C. (1990). Descendants of John Clark of New Haven Connecticut: Who came on the ship *Elizabeth* in 1634 from Ipswich, Suffolk County, England. Privately published, Ann Arbor, Michigan.

Goodrich, M. K. (1928). A bibliography of Michigan authors. Richmond Press, Richmond, Virginia.

Lammers, T. G. (2013). The forgotten first checklist of the Iowa flora: John Henry Rauch's 1851 "Report" to the State Medical and Chirurgical Society. Journal of the Botanical Research Institute of Texas 7: 405–433.

Lammers, T. G. (In press a). An overlooked 1853 list of Iowa plants by a pseudonymous botanist: Who was "Flores"? Annals of the Missouri Botanical Garden.

Lammers, T. G. (In press b). Dr. Moses Cousins Jr.: The mysterious Iowa contributor to Alphonso Wood's *Class-book of Botany*. Brittonia.

Lammers, T. G. (2016). Edwin James: Iowa's first botanist. Journal of the Botanical Research Institute of Texas 10: 475–500.

Mather, F. L. (1915). Who's who of the colored race, vol. 1. Privately published, Chicago, Illinois.

McVaugh, R. (1970). Botanical results of the Michigan Geological Survey under the direction of Douglass Houghton, 1837–1840. The Michigan Botanist 9: 213–243.

Mitchell, J. (1885). The life and times of Levi Scott, D.D., one of the bishops of the Methodist Episcopal Church. Philips & Hunt, New York, N.Y.

Murray, D. (1900). Preliminary list of books and pamphlets by Negro authors for Paris Exposition and Library of Congress. Library of Congress, Washington, D.C.

Richardson, J. M. (1986). Christian Reconstruction. The American Missionary Association and southern blacks, 1861–1890. University of Alabama Press, Tuscaloosa, Alabama.

Richey, A. J., and J. W. Robb. (1869). *The Weekly Albia* (Iowa) *Union* (August 12): 3.

Spectator, A. (1868). Educational. *The Weekly Albia* (Iowa) *Union* (October 1): 3.

Stafleu, F. A., and R. S. Cowan. (1976). Taxonomic literature, ed. 2, vol. 1. Bohn, Scheltema & Holkema, Utrecht, The Netherlands.

Starnes, H. N. (1894). Sweet potatoes. Georgia Experiment Station Bulletin 25: 127–161.

Strong, E. A. (1918). The early history of the Kent Scientific Institute. Pp. 23–27 in First annual report of the art and museum commissioners. C. W. Carman, J. N. Nind, and I. B. Gilbert, editors. Board of Art and Museum Commissioners, Grand Rapids, Michigan.

Voss, E. G. (1978). Botanical beachcombers and explorers: Pioneers of the 19th Century in the Upper Great Lakes. Contributions from the University of Michigan Herbarium 13.

Webb, H. (1884). Wiley University. *Southwestern Christian Advocate* (October 16): 5.

Webb, A. (1885). Wiley University M.E. Church—Marshall, Texas. *Southwestern Christian Advocate* (January 15): 5.

Webb, H. (1886). Wiley University closing. *Southwestern Christian Advocate* (August 5): 5.

Webb, H. (1887a). In full armour. *Southwestern Christian Advocate* (July 14): 4.

Webb, H. (1887b). Obituary of Prof. N. Coleman. *Southwestern Christian Advocate* (July 21): 6.

Webb, H. (1887c). Professor Nathan Coleman. *Christian Advocate* 62: 506.

Webb, H. (1887d). Rev. Nathaneal D. Clifford. *Southwestern Christian Advocate* (April 14): 1.

Wilson, J. G. and J. Fiske. (1900). Appletons' cyclopædia of American biography. D. Appleton & Co., New York, N.Y.

Winchell, N. H. (1861). Catalogue of phænogamous and acrogenous plants found growing wild in the Lower Peninsula of Michigan and the islands at the head of Lake Huron. Pp. 245–330 in First biennial report of the progress of the Geological Survey of Michigan, embracing observations on the geology, zoölogy and botany of the Lower Peninsula. A. Winchell, editor. Hosmer & Kerr, Lansing, Michigan.

Wood, A. (1861). Class-book of Botany. A. S. Barnes & Burr, New York, N.Y.

Wood, A. (1870). The American Botanist and Florist. A. S. Barnes & Co., New York, N.Y.

Wood, A. (1881). Class-book of Botany. A. S. Barnes & Co., New York, N.Y.

Wright, J. (1839). Report of Doct. John Wright, botanist of the geological survey. Pp. 421–442 in Documents accompanying the Journal of the House of Representatives of the State of Michigan, at the annual session in 1839. J. S. & S. A. Bagg, Detroit, Michigan.

A NEW SPECIES OF *HYPERICUM* (HYPERICACEAE) AND SOME NEW COMBINATIONS IN THE VASCULAR FLORA OF THE CHICAGO REGION

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ABSTRACT

Hypericum swinkianum, a new species of *Hypericum* L. Sect. *Myriandra* (Spach) R. Keller Subsect. *Centrosperma* R. Keller (Hypericaceae), is described from the western Great Lakes region. It differs from its closest relative, *Hypericum kalmianum* L., in having notably larger vegetative features, dichasia with more than 7 flowers, and a proclivity for acid sandy soils. In addition, 22 new combinations are provided for taxa in the genera *Dichanthelium, Eurybia, Eutrochium, Halerpestes, Hylodesmum, Minuartia, Nuttallanthus, Persicaria, Ranunculus, Salix,* and *Symphyotrichum*.

KEYWORDS: *Hypericum*, new species, new combinations

INTRODUCTION

Preparation of the forthcoming *Flora of the Chicago Region: A Floristic and Ecological Synthesis* (Wilhelm and Rericha, in press) has resulted in the recognition of a new species of *Hypericum* L. In addition, we wish to recognize a number of taxa that do not have names available in the genera we recognize. New combinations for them are effected here.

NEW SPECIES

Hypericum (Hypericaceae Juss.) is a largely temperate genus comprising about 490 species of annuals, perennials, shrubs, and trees (Robson 2015). The new species, like *Hypericum kalmianum* L., is assigned to Subsection *Centrosperma* R. Keller of the Section *Myriandra* (Spach) R. Keller, a group of 14 shrubby species (Robson 1996).

Description

Hypericum swinkianum Wilhelm & Rericha, sp. nov.

Frutex ramosissimus ad 1.8 m altus, cortex vestior exfoliata; folia coriacea, anguste usque late oblonga, latissima prope vel ultra medio, ad marginem infirme revoluta incrassatave, grandior 1–2 cm lata, 3.5–5 cm longa, plerumque

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TABLE 1. Characters that differentiate between *Hypericum swinkianum* and *H. kalmianum*. Measurements are given as the mean ± one standard deviation. Leaf measurements are based on the average of three of the larger cauline leaves on each of 194 specimens sampled.

Character	*H. swinkianum* (n=16)	*H. kalmianum* (n=178)
Leaf width	11.6 ± 1.4 mm	6.6 ± 1.6 mm
Leaf length	42.7 ± 5.8 mm	30.6 ± 5.9 mm
Length × width of leaf	499.7 ± 108.3 mm^2	206.3 ± 81.9 mm^2
Length of sepal of central floret	10.3 ± 1.2 mm	7.4 ± 1.6 mm
Flowers per dichasium	17 ± 8	6 ± 3

fasciculis axiliaribus; paginae foliorum adaxiales viridiae et abaxiales pallidiore; flores 3–3.5 cm in latitudinem, plerumque 7–31 in dichasia terminalia; sepala ovata rotundata, 9–12 mm longa; petala lutea, circum 1.5 cm longa, patientia, late obovata vel subrotundata, sepalis longiora multo; stamina numerosa, androecium 1.6–1.9 cm latis; styli 5; capsulae 5-partite.

Much-branched shrub to 1.8 m high, with exfoliating bark; leaves coriaceous, narrowly to broadly oblong, broadest at or near the middle, weakly revolute or thickened at the margins, the larger ones 1–2 cm wide, 3.5–5 cm long, usually with axillary fascicles; adaxial leaf surfaces green, the abaxial surfaces pale; flowers 3–3.5 cm in diameter, 7–31 in terminal dichasia; sepals rotund-ovate, 9–12 mm long; petals yellow, about 1.5 cm long, persistent, broadly ovate to subrotund, much longer than the sepals; stamens numerous, the androecium 1.6–1.9 cm across; styles 5; capsules 5-parted.

Table 1 shows features that differentiate *Hypericum swinkianum* Wilhelm & Rericha from *Hypericum kalmianum* L. The stature and vegetative measurements, the compound nature of the dichasium, and the notably different habitat suggest that *Hypericum swinkianum* is specifically distinct from *Hypericum kalmianum*. The vegetative measurements of the type specimen of *Hypericum kalmianum* [#943.2] that is depicted by The Linnean Society of London (2016) clearly lie within the range of specimens retained here as *Hypericum kalmianum*. Figures 1 and 2 are photographs of pressed specimens of the type collection of *Hypericum swinkianum*.

Type

Holotype: U.S.A., Illinois, Cook Co., in Thornton, at Jurgensen Prairie, July 8, 2012, *Rericha & Wilhelm 4126* (MOR); Isotypes: IND, MICH, WIS.

Etymology

Hypericum swinkianum is named in honor of Floyd A. Swink (1921–2000), who studied the natural history of the Chicago region for more than half a century and provided students of the region with numerous books and articles and outings on the local flora.

FIGURE 1. Pressed specimen of *Hypericum swinkianum*, Rericha & Wilhelm 4126 (MOR). Photo by L. Rericha.

Relationship

Hypericum swinkianum is in subsection Centrosperma, which is characterized as shrubs with deciduous leaves articulated at the base, prevailingly dichasial inflorescences, 5-parted flowers with mostly unequal deciduous sepals, 30–numerous deciduous stamens, 3–5 styles, and incompletely axile to parietal placentation. Robson (1996) recognizes 14 species in the subsection, including three subspecies of *Hypericum nitidum* Lam., which are distinguished largely on the

FIGURE 2. Pressed specimen of a dichasium of *Hypericum swinkianum*, Rericha & Wilhelm 4126 (MOR). Photo by L. Rericha.

basis of the shape of the leaf apex. There are three species in subsection Centrosperma in the Chicago region, which can be identified using the following key.

1. Gynoecia 3-merous; flowers 1–5 in lateral dichasia from the distal 2–4 axils .....**Hypericum prolificum** L.
1. Gynoecia prevailingly 5-merous; flowers 1–31 in terminal dichasia, nearly or quite absent from the penultimate axils.
   Larger leaves more than 10 mm wide, broadly obtuse, 3.5–5 cm long, the margins flat or scarcely revolute; dichasia prevailingly 15–31 flowered; larger sepals of proximal central flower 10–12 mm long at anthesis .....**Hypericum swinkianum** Wilhelm & Rericha
   Leaves less than 10 mm wide, obtuse to acute, 2.5–3.5 cm long, the margins usually markedly revolute; dichasia 1–7(–15)-flowered; larger sepals usually less than 10 mm long at anthesis .....**Hypericum kalmianum** L.

Even with the segregation of *Hypericum swinkianum, Hypericum kalmianum* remains a rather variable species. Typical *Hypericum kalmianum* has revolute, acute leaves less than 7 mm wide and 1–7-flowered dichasia. Plants from the region of glacial Lake Wisconsin appear to intergrade, and many have obtuse, scarcely revolute leaves 7–10 mm wide and up to 4 cm long, and 3–7 or rarely up to 15-flowered dichasia. Such plants are suggestive of *Hypericum swinkianum,* but are generally smaller-leaved or lack dichasia with more than 15 flowers or both.

Distribution and Habitat

Hypericum swinkianum typically occurs in acid wetlands and sand prairies. In Illinois and Indiana it is found in wet to mesic acid sand prairies, margins of sphagnum bogs, and swales in black oak savannas and sand flatwoods. These habitats in the Chicago region are restricted to older lake plain of the Glenwood and Calumet stages of glacial Lake Chicago and in the Kankakee Sands section. In Michigan, it occurs in a *Spartina*-dominated swale in a *Pinus banksiana–Quercus ellipsoidalis* savanna on an extensive sandy outwash plain in Cheboygan County. The other Michigan specimen, of Mecosta County, is along a road in an area of sandy-loamy till. Conversely, *Hypericum kalmianum* occurs in calcareous habitats: artesian fens, marly pannés, and along the Great Lakes in calcareous sandy swales. It is rare in calcareous mesic prairies of fine-textured soil. In west-central Wisconsin, *Hypericum kalmianum* also occurs in sand prairies with high-water tables that have developed upon sandy outwash in the depression of glacial Lake Wisconsin (Utech & Iltis 1970). It also occurs in sandy outwash at the base of bluffs along the Mississippi River and its tributaries in Wisconsin.

Additional Specimens

Illinois: Cook Co., moist sandy woods, Thornton, July 16, 1898, *Hill 115.1898* (ILL); sandy swamp, Thornton, July 15, 1939, *Fuller 1691* (ILLS, ISM); S. of Thornton-Lansing Road and W. of Calumet Expressway, September 16, 1959, *Winterringer 16453* (ISM); sand pit, woodland border, Thornton, July 17, 1963, *Evers 77218* (ILLS); Thorn Creek Forest Preserve, June 25, 1964, *Dolbeare 13* (ISM); Thorn Creek Forest Preserve, June 25, 1964, *Dolbeare 5186* (ILLS); Thornton Forest Preserve, July 26, 1973, *Shildneck 6182* (ISM); Thornton, at Jurgensen Prairie in wet-mesic sand prairie, August 19, 2009, *Rericha & Wilhelm 3821* (MOR); Thornton, at Jurgensen Prairie in wet-mesic sand prairie, July 8, 2011, *Rericha & Wilhelm 3980* (MOR).

Indiana: Marshall Co., along R. R. south of Culver, August 4, 1935, *McCoy 4185* (BUT); Porter Co., dunes near Mineral Springs, July 2, 1922, *Lyon s.n.* (IND); Starke Co., in an open and low sandy black and white oak woods on the southeast side of Bass Lake, August 22, 1916, *Deam 21033* (IND); in black-pin oak woods 2.5 miles northwest of North Judson, June 26, 1922, *Deam 36718* (NY); west of Ober in moist savanna, July 2, 2010, *Rericha & Wil-*

helm 3976, (MOR); at Hartz Lake in a peaty meadow, July 18, 2010, *Rericha & Wilhelm 3989* (MOR).

Michigan: Cheboygan Co., dryish *Spartina* meadow near upper edge of sandy depression in open Jack Pine-Hill's Oak stand, August 1, 2015, *Reznicek & Fawcett 12378* (MICH, MOR); Mecosta Co., Aetna Twp, 1 Mile Road at 220th Ave, 0.4 mi. south, east side, in dry roadside ditch, July 29, 2000, *Ross 722* (MICH).

NEW COMBINATIONS

The new combinations presented are treated in Wilhelm & Rericha (in press), either as a recognized taxonomic element or mentioned in a taxonomic discussion. Many represent transfers of infraspecific taxa to different genera or species. Others, such as *Dichanthelium deamii*, are recognized as locally distinct both morphologically and phytogeographically.

Dichanthelium deamii (Hitchc. & Chase) Wilhelm & Rericha, *comb. nov.*

Basionym: *Panicum deamii* Hitchc. & Chase in Deam, Grasses of Indiana 284, fig. 18, pl. 75, map 187. 1929. An endemic of northwest Indiana, the significance of this species heretofore has been unrecognized.

Dichanthelium depauperatum (Muhl.) Gould var. ***involutum*** (Torr.) Wilhelm & Rericha, *comb. nov.*

Basionym: *Panicum involutum* Torr., Fl. N. Middle United States 144. 1823.
Panicum depauperatum Muhl. var. *involutum* (Torr.) Alph. Wood, Class-book Bot. (ed. 1861) 786. 1861.

Dichanthelium huachucae (Ashe) Wilhelm & Rericha, *comb. nov.*

Basionym: *Panicum huachucae* Ashe, J. Elisha Mitchell Sci. Soc. 15:51. 1898. Although not recognized by contemporary students of the genus, this grass is quite distinct locally and is the least conservative element of the *Dichanthelium implicatum* complex.

Dichanthelium huachucae (Ashe) Wilhelm & Rericha) var. ***silvicola*** (Hitchc. & Chase) Wilhelm & Rericha, *comb. nov.*

Basionym: *Panicum huachucae* (Ashe) var. *silvicola* Hitchc. & Chase, Rhodora 10:64. 1908.

Dichanthelium sphaerocarpon (Elliott) Gould var. ***inflatum*** (Scribn. & J. G. Sm.) Wilhelm & Rericha, *comb. nov.*

Basionym: *Panicum inflatum* Scribn. & J. G. Sm., Cir. Div. Agrostol. U.S.D.A. 16:5. 1899.
Panicum sphaerocarpon Elliott subsp. *inflatum* (Scribn. & J. G. Sm.) Hitchc., Contr. U.S. Natl. Herb. 15: 253, fig. 275. 1910.
Panicum sphaerocarpon Elliott var. *inflatum* (Scribn. & J. G. Sm.) Hitchc., Man. Grasses U.S. 643, 913. 1935.

Dichanthelium tennesseense (Ashe) Wilhelm & Rericha, *comb. nov.*

Basionym: *Panicum tennesseense* Ashe, J. Elisha Mitchell Sci. Soc. 15:52. 1898. Although not recognized by contemporary students of the genus, this segregate of the *Dichanthelium implicatum* complex is quite distinctive locally and is confined to fen systems and wet calcareous prairies.

Dichanthelium tsugetorum (Nash) Wilhelm & Rericha, *comb. nov.*

Basionym: *Panicum tsugetorum* Nash, Bull. Torrey Bot. Club 25:86. 1898.

Eurybia furcata (E. S. Burgess) G. L. Nesom f. ***elaciniata*** (Benke) Wilhelm & Rericha, *comb. nov.*

Basionym: *Aster furcatus* E. S. Burgess var. *elaciniatus* Benke, Amer. Midl. Naturalist 13:326. 1932.
Aster furcatus E.S. Burgess f. *elaciniatus* (Benke) Shinners, Amer. Midl. Naturalist 26:405. 1941.

Eurybia macrophylla (L.) Cass. var. ***ianthina*** (Fernald) Wilhelm & Rericha, *comb. nov.*
Basionym: *Aster ianthinus* E. S. Burgess, Ill. Fl. N. U.S. (Britton & Brown) 3:360. 1898.
Aster macrophyllus L. var. *ianthinus* (E. S. Burgess) Fernald, Fl. Southington [C.H. Bissell & L. Andrews] 99. 1902.

Eurybia macrophylla (L.) Cass. var. ***pinguifolia*** (E. S. Burgess) Wilhelm & Rericha, *comb. nov.*
Basionym: *Aster macrophyllus* L. var. *pinguifolius* E. S. Burgess, Ill. Fl. N. U.S. [Britton & Brown] 3:360. 1898.

Eurybia macrophylla (L.) Cass. var. ***velutina*** (E. S. Burgess) Wilhelm & Rericha, *comb. nov.*
Basionym: *Aster macrophyllus* L. var. *velutinus* E. S. Burgess, Ill. Fl. N. U.S. [Britton & Brown] 3: 360. 1898.

Eutrochium maculatum (L.) E. E. Lamont f. ***faxonii*** (Fernald) Wilhelm & Rericha, *comb. nov.*
Basionym: *Eupatorium maculatum* L. f. *faxonii* Fernald, Rhodora 47:195. 1945.
Halerpestes cymbalaria (Pursh) Greene f. ***hebecaulis*** (Fernald) Wilhelm & Rericha, *comb. nov.*
Basionym: *Ranunculus cymbalaria* Pursh f. *hebecaulis* Fernald, Rhodora 16:162. 1914.

Hylodesmum glutinosum (Willd.) H. Ohashi & R. R. Mill f. ***chandonnetii*** (Lunell) Wilhelm & Rericha, *comb. nov.*
Basionym: *Meibomia grandiflora* (DC.) Kuntze var. *chandonnetii* Lunell, Amer. Midl. Naturalist 2:128. 1911.
Desmodium glutinosum (Willd.) Alph. Wood f. *chandonnetii* (Lunell) B. G. Schub., Rhodora 52:138. 1950.

Minuartia patula (Michx.) Mattf. f. ***media*** (Steyerm.) Wilhelm & Rericha, *comb. nov.*
Basionym: *Arenaria patula* Michx. f. *media* Steyerm. Rhodora 43:331. 1941.

Nuttallanthus canadensis (L.) D. A. Sutton f. ***albinus*** (Fernald) Wilhelm & Rericha, *comb. nov.*
Basionym: *Linaria canadensis* (L.) Dum. Cours. f. *albina* Fernald, Rhodora 45:476. 1943.

Persicaria hydropiperoides (Michx.) Small var. ***strigosa*** (Small) Wilhelm & Rericha, *comb. nov.*
Basionym: *Polygonum hydropiperoides* var. *strigosum* Small, Bull. Torrey Bot. Club 19:355. 1892.
Polygonum hydropiperoides Michx. f. *strigosum* (Small) Stanford, Rhodora 28:26. 1926.

Ranunculus flabellaris Raf. f. ***rosiflorus*** (Clute) Wilhelm & Rericha, *comb. nov.*
Basionym: *Ranunculus delphinifolius* Eaton f. *rosiflorus* Clute, Amer. Bot. 34:106. 1928. *Ranunculus delphinifolius* Torr. *ex* Eaton is considered by contemporary authors to be conspecific with *R. flabellaris* (Whittemore & Parfitt 1997).

Salix myricoides Muhl. var. ***angustifolia*** (C. F. Wheeler & E. F. Sm.) Wilhelm & Rericha, *comb. nov.*
Basionym: *Salix glaucophylla* (Bebb) Bebb var. *angustifolia* C. F. Wheeler & E. F. Sm., Cat. Phaen. Crypt. Pl. Mich. 72. 1881. *Salix glaucophylla* (Bebb) Bebb is considered synonymous with *S. myricoides* (Argus 2010).

Symphyotrichum ericoides (L.) G. L. Nesom f. ***gramsii*** (Benke) Wilhelm & Rericha, *comb. nov.*
Basionym: *Aster ericoides* L. f. *gramsii* Benke, Amer. Midl. Naturalist 13:328. 1932.

Symphyotrichum novae-angliae (L.) G. L. Nesom f. ***roseum*** (Desf.) Wilhelm & Rericha, *comb. nov.*
Basionym: *Aster roseus* Desf., Tabl. École Bot. (ed. 3). 401. 1812.
Aster novae-angliae L. var. *roseus* (Desf.) DC., Prodr. 5:232. 1836.
Aster novae-angliae L. f. *roseus* (Desf.) Britton, Proc. Nat. Sci. Assoc. Staten Island 2. 1890.

Symphyotrichum puniceum (L.) Áskell Löve & D. Löve f. ***candidum*** (Fernald) Wilhelm & Rericha, *comb. nov*.

Basionym: *Aster puniceus* L. f. *candidus* Fernald, Rhodora 51:95. 1949.

Symphyotrichum shortii (Lindl.) G. L. Nesom f. ***gronemannii*** (Benke) Wilhelm & Rericha, *comb. nov*.

Basionym: *Aster shortii* Lindl. f. *gronemannii* Benke, Rhodora 31:150. 1929.

LITERATURE CITED

Argus, G. W. (2010). *Salix*. Pp. 23–162 in Flora of North America, Vol. 7. Magnoliophyta: Salicaceae to Brassicaceae, Flora of North America Editorial Committee, editors. Oxford University Press, New York, N.Y.

Linnean Society of London. (2016). The Linnean collections: *Hypericum*. Available at http://linnean-online.org/view/type/specimen/Hypericum.html (Accessed October 27, 2016).

Robson, N. K. B. (1996). Studies in the genus *Hypericum* L. (Guttiferae) 6. Sections 20. *Myriandra* to 28. *Elodes*. Bulletin of the Natural History Museum London (Botany) 26: 75–217.

Robson, N. K. B. (2015). *Hypericum.* Pp. 71–105 in Flora of North America, Vol. 6. Magnoliophyta: Cucurbitaceae to Droseraceae. Flora of North America Editorial Committee, editors. Oxford University Press, New York, N.Y.

Utech, F. H., and H. H. Iltis. (1970). Preliminary reports on the flora of Wisconsin, No. 61. Hypericaceae—St. John's Wort family. Transactions of the Wisconsin Academy of Sciences, Arts and Letters 58: 325–351.

Whittemore, A. T. and B. D. Parfitt. (1997). *Ranunculus.* Pp. 85-135 in Flora of North America, Vol. 3. Magnoliophyta: Magnoliidae and Hamamelidae. Flora of North America Editorial Committee, editors. Oxford University Press, New York, N.Y.

Wilhelm, G. and L. Rericha. (In press). Flora of the Chicago region: A floristic and ecological synthesis. Indiana Academy of Science, Indianapolis.

A COMMENTARY ON SCHOTT'S *GENERA FILICUM*

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Heinrich Wilhelm Schott (January 7, 1794–March 5, 1865) was an Austrian botanist well known for his extensive work on aroids (Araceae). His name is known to North American botanists as the author of combinations like *Arisaema triphyllum* (L.) Schott (Jack-in-the-pulpit) and *Arisaema dracontium* (L.) Schott (Green Dragon), both of which are to be found in Schott and Endlicher, *Meletemata Botanica*, 1832, a work whose title may be translated as "Botanical Thoughts." He also named *Thelypteris palustris* Schott, Marsh Fern, about which more below.

According to Taxonomic Literature-2 (TL-2), *Genera Filicum* was published in four fascicles, from 1834 to 1836. Each fascicle was said to be of five plates, each with accompanying letterpress. There are no plate numbers, and the entire book is unpaginated. Therefore, it is critical, for nomenclatural purposes, to establish the proper sequence of the twenty elements that comprise the book.

TL-2 cites two contemporaneous reviews as the source for the publishing history of the work. The reviews appeared in the journal *Linnaea* and are ascribed to one Gersdorf, although there is no internal evidence in the journal as to authorship of the reviews. Fortunately, whether the editor (Schlechtendal) or someone else wrote the reviews is of no nomenclatural significance. The reviews appear in what amounts to an appendix to the journal proper, a separately paginated section termed *Litteratur-Bericht zur Linnaea für das Jahr* 18xx. The reviews appeared in *Linnaea* 9 (*Litteratur-Bericht)*: 92–95. 1834 for fascicles 1 and 2, and *Linnaea* 10 (*Litteratur-Bericht)*: 174–175, 1836, for fascicles 3 and 4.

For the purposes of fern nomenclature, the plates and letterpress are assumed to have been published in the order cited in the reviews, as follows:

Fascicle 1, plate 1, *Anaxetum*; plate 2, *Aspidium*; plate 3, *Nephrolepis*; plate 4, *Sphaeropteris*; and plate 5, *Trichopteris*. 1834.

Fascicle 2, plate 6, *Cystopteris*; plate 7, *Nephrodium*; plate 8, *Olfersia*; plate 9, *Polybotrya*; and plate 10, *Polystichum*. 1834.

Fascicle 3, plate 11, *Lonchitis;* plate 12, *Meniscium*; plate 13, *Hemionitis*; plate 14, *Bolbitis*; and plate 15, *Marattia*. 1835

Fascicle 4, plate 16, *Egenolfia* (as 'Egenolphia'); plate 17, *Cochlidium*; plate 18, *Monogramme*; plate 19, *Aglaomorpha*; and plate 20, *Taenitis*. 1836.

As one can imagine, subscribers and libraries had to wait for the arrival of all four fascicles before binding them as one book. Today, the on-line listing for

Schott's *Genera Filicum* at the website for the Bayerische StaatsBibliothek Digital has only the pages for the following genera, arranged in alphabetical order: *Anaxetum, Aspidium, Hemionitis, Lonchitis, Marattia, Meniscium, Nephrolepis, Olfersia, Sphaeropteris*. The complete work does not appear at the Digital site. The title is not available at Biodiversity Heritage Library, nor at Biblioteca Digital de Real Jardin Botanico, nor at Botanicus.org.

So far as I know, the only complete paper copy of the work generally available is for sale at any of the numerous stations of On Demand Books, at a price of $8-10. This is a scanned-in version by Google; alternatively, one may download the Google pdf and print one's own copy. The digitized version is from the Bibliotheca Regia Monacensis; that is to say, the Royal Munich Library, the predecessor of today's Bayerische StaatsBibliothek, the Bavarian State Library. Its card catalog refers one to the Google version, or it can be read on-line. The arrangement is alphabetical, with the exception that *Cystopteris* is misplaced, probably because the letter "y" scarcely exists in modern German, and the librarian or bookbinder in the early 19th century undoubtedly treated it as an "i". Apparently, librarians of the day did not read book reviews in *Linnaea* and quite understandably put the thing together alphabetically.

The nomenclatural innovations in Schott's *Genera Filicum* are as follows: the new genera are *Anaxetum*, *Aglaomorpha, Bolbitis*, *Egenolfia*, and *Nephrolepis*. There are two further "implied" genera, *Elaphoglossum* and *Rhipidopteris*. These two genera are added as a footnote to the treatment for *Bolbitis*, but they are defined only by the names of the species that Schott thought ought to be included; because there is no description or diagnosis of the two genera, they are not validly published (Melbourne Code, Article 38), even though they were accepted in *Index Filicum*, 1903, published a few years before the first modern botanical code. Both genera were subsequently validly published by other authors. In *Index Filicum*, these five new genera are all cited correctly: *Anaxetum*, Plate 1; *Aglaomorpha,* Plate 19; *Bolbitis*, Plate 14; *Egenolfia*, Plate 16; and *Nephrolepis* Plate 3. It appears that the author (Carl Christensen) had a correctly-bound copy of the book, or that he had consulted the two reviews in *Linnaea.*

As a kind of footnote to the treatment of *Nephrolepis*, Plate 3, (**not** Plate 10!), Schott creates the combination *Thelypteris palustris* Schott. Somehow, perhaps beginning with Christensen's *Index Filicum*, this has consistently been ascribed to Plate 10, *Polystichum*, where it does not occur. Obviously, the ascriptions are at cross purposes, but continue to the present, as at International Plant Names Index (IPNI) and at Tropicos.

The epithet is a substitute name; the nomenclatural source of Schott's name is ultimately *Acrostichum thelypteris* L., *Species Plantarum* 2: 1071, 1753, but of course bringing the Linnaean epithet into *Thelypteris* would have created a tautonym, which most botanists have long eschewed, and today's Code forbids—hence Schott's substitute epithet. It is tempting to suppose that Schott in 1834 had in mind *Aspidium palustre* S. F. Gray, *A Natural Arrangement of British Plants* 2(1): 9, 1821. However, Gray's epithet was superfluous when published and is therefore illegitimate. As a *nomen illegitimum*, it cannot serve as a basionym. Fernald (*Rhodora* 31(362): 27–36. 1929) took up *Theylpteris palustris* (Salisbury) Schott. The basionym for this combination is *Polypodium palustre*

Salisbury, *Prodromus Stirpium in Horto* . . . 403. 1790. The Salisbury binomial was an avowed substitute for *Acrostichum thelypteris* L.; it is therefore another *nomen illegitimum* and cannot serve as a basionym for any other combination.

To sum up: *Genera Filicum* (Schott) with all 20 plates and text is now generally available to the public; the scheme given above will allow one to go through by hand and properly label each plate and its accompanying letterpress. To cite the work unambiguously, it will be necessary to cite both the inferred plate number and the name of the plate: e.g., *Thelypteris palustris* Schott, Gen. Fil. pl. 3, sub *Nephrolepis*. 1834.

NOTEWORTHY COLLECTIONS

FIRST REPORT OF *HYPERICUM ADPRESSUM* (HYPERICACEAE) IN MICHIGAN

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Significance of the Report. The first documented report of this native, globally rare, Atlantic Coastal Plain disjunct species from the State of Michigan.

Previous Knowledge. *Hypericum adpressum* Barton (Hypericaceae), Creeping St. John's-wort, is a medium-sized, strongly rhizomatous, perennial wetland forb of seasonally inundated depressional wetlands. Along much of the Atlantic Coastal Plain this species is typically known from various types of intermittent ponds and also from a diversity of other habitats including marshy shores, wet meadows, bogs, swales, ditches, and even moist depressions in sand prairies (Robson 2015; Witsell 2007; Crow and Hellquist 2000; Gleason and Cronquist 1991; Godrey and Wooten 1981). In New England, the habitat is characterized by Enser (2001) as damp sands, gravels, and peats on the exposed shores and inundated margins of freshwater ponds, whereas Haines (2011) notes that in this same region it also occurs on river shores and coastal plain pond shores and in sandy and peaty depressions. This native North American species occurs primarily from Massachusetts and Rhode Island south to Georgia along the Atlantic Coastal Plain, occurring sporadically to the west with several marked disjunct occurrences documented in Arkansas, Missouri, Illinois, Indiana, Kentucky, and Tennessee (USDA, NRCS 2016).

Discussion. We discovered *Hypericum adpressum* (Figure 1) in the central-west portion of Lower Michigan during natural community and botanical surveys in Newaygo County. The nearest record relative to this new Michigan locality (Michigan Flora Online 2011) is from Porter County in northwest Indiana, more than 175 miles away. This follows a pattern strongly similar to the distribution of several other Atlantic Coastal Plain disjuncts known in the upper Midwest, as described in a thorough overview of this pattern by Reznicek (1994). Although *Hypericum adpressum* may be locally dominant within a site, as amply observed in subsequent visits of our Michigan discovery, it is not classified as a common taxon in any state within its documented distribution. Globally the species is considered to be vulnerable (G3), and a review of state conservation status ranks shows that *Hypericum adpressum* is classified as either critically im-

FIGURE 1. *Hypericum adpressum* in flower in coastal plain marsh near Little Robinson Lake, Manistee National Forest, Newaygo County, Michigan. Photo by Bradford S. Slaughter.

periled (S1) or imperiled (S2) in each of the 15 states where it is considered to be extant (NatureServe 2015). In the remaining five states where this species has been documented, it is known only from historical records (four states) or is considered to be extirpated (one state). In Michigan, *Hypericum adpressum* is currently ranked as critically imperiled and is protected as a state threatened species (Michigan Natural Features Inventory 2016). Interestingly, when we discovered

this species, we found it in abundance in an area well-known to, and frequented by, botanists familiar with wetlands known to contain Atlantic Coastal Plain disjunct species. This forb was discovered at a site within the Manistee National Forest near Little Robinson Lake, in a tract southwest of White Cloud that encompasses an exemplary wetland complex of high-quality coastal plain marshes, a rare natural community type in Michigan (Cohen et al. 2014). Any of a number of factors may have hampered an earlier discovery of *Hypericum adpressum* in Michigan, including the highly variable water table fluctuations that can occur in coastal plain marshes both within and between seasons. During high water years, *Hypericum adpressum* may have been dormant (non-emergent) or sterile and highly reduced in size, and similarly dormant or depauperate during droughty years with protracted drawdowns. This robust species also may have simply been missed as a result of a fortuitous mismatch in the timing of surveys with the flowering period. Our collective experience with the coastal plain marsh community in Michigan, which has included annual plot monitoring in southwest Michigan, has demonstrated that vegetation structure and composition can change markedly from season to season, even when apparently similar habitat conditions persist, thus indicating the need for future research to better understand this biologically significant and diverse wetland type.

Diagnostic Characters. *Hypericum adpressum* is a rhizomatous perennial forb about 40-75 cm in height, occasionally having a woody or spongy base, and with opposite, pinnately-veined, linear-oblong leaves that have revolute margins (Voss and Reznicek 2012, Robson 2016, Gleason and Cronquist 1991). The flowers, which are usually numerous and begin to develop in late June to midsummer, are borne terminally. The sepals are revolute, and the seeds are distinctly less than 1 mm in length (Voss and Reznicek 2012). *Hypericum sphaerocarpum* (Round-fruited St. John's-wort), a similar species that can be distinguished by its flat sepals and seeds that are at least 2 mm long, also differs in being a species of dry to somewhat moist upland habitats, and is known in the state from only a single locality in Monroe County in extreme southeastern Michigan.

Specimen Citations. Newaygo County: T13N R12W Sec. 19. Lat: 43.504609, Long: -85.800283. Locally common in large coastal plain marshes. With *Rhynchospora fusca, Rhynchospora capitellata, Euthamia remota, Panicum spretum. Walters and Penskar 9016*, Sept. 29, 2005 (MICH). T13N R12W S19. Forms dominant cover in several shallow wetland depressions supporting numerous coastal plain disjuncts. Flowers yellow. Colonies discovered by M. Penskar and B. Walters in 2005. *Bradford S. Slaughter 536*, July 10, 2006 (MICH). T13N R12W Sec. 19. Large coastal plain marshes near Centerline Rd and 28th St. Locally common, with *Calamagrostis canadensis, Euthamia remota, Panicum spretum, Rhynchospora capitellata, Rhynchospora fusca*. Flowers bright yellow. *Walters and Spalink 856*, July 19, 2006 (MICH). SW of W 24 Street and Ferris Ave junction, ca. 7 km SW of White Cloud. Lat.: 43° 30′ 26.3″N, Long: –85° 50′ 03.4″W. Emergent shoreline and shallow water on sandy/peaty shore of small lakes. Abundant, forming dense stands on the shoreline. Flowers yellow, stems with aerenchyma near the base. *Reznicek et al. 11833*, Aug. 17, 2006 (MICH).

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LITERATURE CITED

Cohen, J. G., M. A. Kost, B. S. Slaughter, and D. A. Albert. (2014). A field guide to the natural communities of Michigan. Michigan State University Press, East Lansing.

Crow, G. E., and C. B. Hellquist. (2000). Aquatic and wetland plants of northeastern North America. Volume 1. Pteridophytes, gymnosperms, and angiosperms: Dicotyledons. University of Wisconsin Press, Madison.

Enser, R. W. (2001). *Hypericum adpressum* (Creeping St. John's-wort) Conservation and research plan. New England Wild flower society, Framingham, Massachusetts. Available at http://www.nwefs.org (Accessed January 20, 2016).

Gleason, H. A., and A. Cronquist. (1991). Manual of the vascular plants of northeastern United States and adjacent Canada, 2nd edition. The New York Botanical Garden, Bronx, N.Y.

Godfrey, R. K., and J. W. Wooten. (1981). Aquatic and wetland plants of southeastern United States. Dicotyledons. University of Georgia Press, Athens.

Haines, A. (2011). Flora novae angliae. A manual for the identification of native and naturalized higher vascular plants of New England. New England Wildflower Society, Yale University Press, New Haven, Connecticut.

Michigan Flora Online. A. A. Reznicek, E. G. Voss, and B. S. Walters. January (2011). University of Michigan. Available at http://michiganflora.net/home.aspx (Accessed April 6, 2015).

Michigan Natural Features Inventory. (2016). Rare species explorer. Available at http://mnfi.anr.msu.edu/explorer (Accessed January 20, 2016).

NatureServe. 2015. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available at http://explorer.natureserve.org. (Accessed: January 20, 2016).

Reznicek, A. A. (1994). The disjunct coastal plain flora in the Great Lakes region. Biological Conservation 68: 203–215.

Robson, K. B. R. (2015). Hypericaceae. Pp. 71–105 in Flora of North America, Volume 6: Magnoliophyta: Cucurbitaceae to Droseraceae. Flora of North America Editorial Committee, editors. Oxford University Press, New York, N.Y.

USDA, NRCS. (2015). The PLANTS Database, National Plant Data Center, Baton Rouge, Louisiana. Available at http://plants.usda.gov/ (Accessed January 19, 2016).

Voss, E. G., and A. A. Reznicek. (2012). Field manual of Michigan flora. University of Michigan Press, Ann Arbor.

Witsell, C. T. (2007). *Hypericum adpressum* (Clusiaceae) new to Arkansas and the Ouachita Mountains, U.S.A. Journal of the Botanical Research Institute of Texas 1: 713–716.

NOTEWORTHY COLLECTIONS

REDISCOVERY OF *MIMULUS ALATUS* (PHRYMACEAE) IN MICHIGAN

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Significance of the Report. Prior to this collection, *Mimulus alatus* was considered extirpated from Michigan and had not been collected in the state since 1916.

Previous Knowledge. *Mimulus alatus* Aiton (Phrymaceae) (Figure 1), the winged monkey-flower, wing-stemmed monkey-flower, or sharpwing monkey-flower, is a perennial herb of low ground, occurring primarily in swamps and wet woods and on shady streambanks (Fernald 1950; Gleason and Cronquist 1991); it is also known from wet open places (Penskar and Crispin 2004). A common plant farther south (Swink and Wilhelm 1994; Voss and Reznicek 2012), *M. alatus* reaches the northern extent of its native range in Iowa, Michigan, New York, Massachusetts, and Ontario (Kartesz 2015; USDA, NRCS 2016). In Michigan, the most recent herbarium records of *M. alatus* are from Macomb, Oakland, and Wayne counties in the southeastern corner of the state (Voss and Reznicek 2012), but Voss (1996) questioned the origin of the records from Oakland and Wayne counties, noting that the collections from all three counties were made on the same day in 1916 by different collectors who nevertheless often botanized together. He suspected that all three collectors were together when the plant was collected in Macomb County (the collection with the most precise locality data on the label) and that the other two collectors labelled their collections later when they were uncertain of their provenance. In addition, a First Survey collection of *M. alatus* by John Wright and George Bull from Berrien County in 1838 was recently discovered (A. Reznicek pers. comm. August 12, 2015; Reznicek et al. 2011).

Discussion. Two small colonies of *Mimulus alatus* were discovered in a Galien River floodplain forest in Berrien County in 2015 (Figure 2). A brief search of the floodplain in the immediate vicinity following the discovery did not result in the observation of any additional colonies of *M. alatus*. Since *M. alatus* had not been documented in Michigan since 1916, it had been considered "Presumed Extirpated" (State Status = X, State Rank = SX) from Michigan (Michigan Natural Features Inventory 2007) and would be treated as legally "Threatened" (T) if rediscovered. Habitat information for *M. alatus* in Michigan was

FIGURE 1. *Mimulus alatus* in a Galien River floodplain, Berrien County, Michigan. Photo by Scott A. Namestnik.

also lacking; the associated species list documented for this collection of *M. alatus* provides more precise habitat information that could lead to additional successful searches for *M. alatus* in the state. *Mimulus alatus* is at the northern edge of its geographical range in southern Michigan and was likely never abundant in the state, but its rediscovery after nearly 100 years should encourage field botanists to conduct additional targeted surveys for it in appropriate habitat.

Diagnostic Characters. *Mimulus alatus* can most easily be confused with the other blue-flowered species of *Mimulus* in Michigan, *M. ringens*, which also has four-angled stems (Voss and Reznicek 2012) and is much more common and widespread. *Mimulus alatus* differs from *M. ringens* in having petiolate leaves with coarsely toothed margins and pedicels that are shorter than the calyces (Figure 3), whereas the leaves in the latter are sessile and often somewhat clasping (Fernald 1950; Gleason and Cronquist 1991; Swink and Wilhelm 1994; Penskar and Crispin 2004; Voss and Reznicek 2012) with scalloped to weakly toothed margins (Penskar and Crispin 2004), and the pedicels are longer than the calyces (Gleason and Cronquist 1991; Voss and Reznicek 2012). As the common name implies, the stems of *M. alatus* are often somewhat winged (as compared to

FIGURE 2. Floodplain habitat of *Mimulus alatus* in Berrien County, Michigan. Photo by Scott A. Namestnik.

being wingless or obscurely winged in *M. ringens*) (Fernald 1950; Swink and Wilhelm 1994).

Specimen Citation. BERRIEN CO.: Galien River Marsh County Park. 41.80470, -86.72010. In floodplain ravine. Over 100 stems present in two subpopulations. In subpopulation from which collection was made, plants in three groups separated by 10 to 15 feet (subpopulation approximately 42 feet by 10 feet) in saturated swale that is likely an abandoned stream channel. The other subpopulation is located at 41.80458, –86.72014 and is very small, consisting of only four plants along a dry to saturated streambed. Walked a short distance up and down floodplain and saw no additional populations. Some plants fallen over and rooting from stems. Corollas light lavender. Associated species: *Acer saccharum*, *Bidens frondosa*, *Boehmeria cylindrica*, *Cinna arundinacea*, *Fraxinus pennsylvanica* var. *lanceolata*, *Geum canadense*, *Glyceria striata*, *Impatiens*

FIGURE 3. Flower of *Mimulus alatus*. Note the short pedicel. Photo by Scott A. Namestnik.

capensis, *Iris virginica* var. *shrevei*, *Leersia oryzoides*, *Lindera benzoin*, *Lonicera* sp., *Lysimachia ciliata*, *Parthenocissus quinquefolia*, *Pilea pumila*, *Quercus rubra*, *Ranunculus hispidus* var. *nitidus*, *Sambucus canadensis*, *Samolus parviflorus*, *Scutellaria lateriflora*, *Sium suave*, *Solanum dulcamara*, *Symphyotrichum lanceolatum*, *Symphyotrichum lateriflorum*. *Rosa multiflora* in the vicinity. August 13, 2015, *Namestnik 2660* (MICH, MOR).

LITERATURE CITED

Fernald, M. L. (1950). Gray's manual of botany, eighth (centennial) edition. American Book Company, New York, N.Y.

Gleason, H. A., and A. Cronquist. (1991). Manual of vascular plants of northeastern United States and adjacent Canada. Second edition. The New York Botanical Garden, Bronx, N.Y.

Kartesz, J. T. (2015). The Biota of North America Program (BONAP). North American plant atlas. Chapel Hill, North Carolina [maps generated from Kartesz, J. T. 2015. Floristic synthesis of North America, version 1.0. Biota of North America Program (BONAP). (in press)]. Available at http://bonap.net/napa (Accessed February 25, 2016).

Michigan Flora Online. A. A. Reznicek, E. G. Voss, & B. S. Walters. (2011). University of Michigan. Available at http://michiganflora.net/species.aspx?id=1908 (Accessed February 25, 2016).

Michigan Natural Features Inventory. (2007). Rare species explorer. Available at http://mnfi.anr.msu.edu/explorer (Accessed February 25, 2016).

Penskar, M. R., and S. R. Crispin. (2004). Special plant abstract for *Mimulus alatus* (wing-stemmed monkey-flower). Michigan Natural Features Inventory, Lansing.

Swink, F., and G. Wilhelm. (1994). Plants of the Chicago region. Fourth edition. Indiana Academy of Science, Indianapolis.

USDA, NRCS. (2016). The PLANTS Database. National Plant Data Team, Greensboro, North Carolina. Available at http://plants.usda.gov (Accessed February 18, 2016).

Voss, E. G. (1996). Michigan flora, Part III: Dicots (Pyrolaceae–Compositae). Cranbrook Institute of Science and University of Michigan Herbarium.

Voss, E. G., and A. A. Reznicek. (2012). Field manual of Michigan flora. The University of Michigan Press, Ann Arbor.

BOOK REVIEW

Joshua G. Cohen, Michael A.Kost, Bradford S. Slaughter and Dennis A. Albert, *A Field Guide to the Natural Communities of Michigan*. 2015. Michigan State University Press. xlii + 362 pp., paperback. ISBN: 978-1-61186-134-1. $34.95 (also available as an ebook in PDF format).

As the title indicates, this book describes the natural communities of Michigan, community being defined as "an assemblage of interacting plants, animals, and other organisms that repeatedly occurs under similar environmental conditions across the landscape and is predominantly structured by natural processes rather than modern anthropogenic disturbances" (p. xii). About these interconnections—the organisms in these communities are interconnected by nutrients and energy flowing among the community members as well as chemical signals exchanged among them. At the outset, it is important to note that many of the biological communities that we encounter are significantly modified directly and indirectly by human activities, for example, the loss of American chestnut trees, or, more recently, the loss of ash trees or unnaturally high deer populations.

The objectives of the book are stated as "to serve as a tool for those seeking to understand, describe, document, and restore the diversity of natural communities native to Michigan." These objectives are very well achieved, and this volume provides a much-needed gateway to, and foundation for, understanding and managing Michigan's valuable natural heritage. I would add that this book's impact will extend well beyond these basic objectives. The book is necessarily information heavy; nevertheless, I found it easy to read at either of two different levels—perusal of the larger picture or more focused gleaning of details—or even switching back and forth between the two levels (as I often do). The authors clearly have invested an enormous amount of very thoughtful effort spanning several decades. In the pursuit of my own personal interests and conservation work, I have watched this book develop through a series of reports and Michigan Natural Features Inventory (MNFI) web pages. Though these reports remain valuable, this volume now stands on its own.

The book is very well organized and structured, which facilitates readability at both of the levels noted above. The authors recognize 77 communities in Michigan (p. xvi), some of them relatively minor. The communities are aggregated into five classes: Palustrine (wet lands), Terrestrial, Palustrine/Terrestrial (a characteristic mix), Primary (primary succession on terrestrial geological foundational substrata), and Subterranean/Sink. These classes are in turn subdivided into groups; for example, the Terrestrial class is divided into Prairie, Savanna, and Forest groups. This organizational scheme imposes a degree of order into the great diversity encompassed by these 77 communities, thereby greatly facilitating our ability to comprehend and work with the state's diverse natural heritage.

Each community is characterized in terms of its plants, its environmental fea-

tures, a state rating of its abundance or rarity, and its geographical distribution (which is documented with very nice maps). The plants are grouped into graminoids, forbs, ferns, fern allies, woody vines, mosses, shrubs, and trees, which greatly aids in grasping this diversity, especially for beginners. In addition, the communities are beautifully, yet informatively, illustrated. Indeed, you can use this book to take a very pleasant virtual field trip in the convenience and comfort of your home. The illustration on pages 182–183 of a remnant of the now extirpated bur oak plains community is both amusing and sad, but it does remind us what will happen to many, if not most, of these communities without our help. The teacher in me knows well that these maps and illustrations represent an enormous amount of work; they also greatly enhance our understanding by reaching visually out into the real world. There is a glossary to help with terminology. Even beginners can navigate this classification and understand the larger picture as well as appreciating the individual communities, yet professionals with specialized objectives will find the detailed information that they need.

It seems important to deal preemptively with the question of why the animals, fungi, and bacteria that also make up these communities are not covered here? Plants are foundational to these biological communities—they set the stage; they are what characterize the communities and provide the structure and matrix for all other organisms. Furthermore, including these additional facets of diversity would be overwhelming, requiring either an expanded volume that would have to be longer and unwieldy, or the omission of much necessary foundational information about these communities. The choice adopted by the authors is appropriate. Nonetheless, these other organisms need to be considered in community restorations, and, hopefully, they will eventually be covered in other contexts.

Lastly, it seems very important to articulate some of the benefits of this volume beyond its stated objectives. Michigan is endowed with an unusually rich natural heritage as represented in these communities. These are valuable assets for tourism, which is a major industry in Michigan, and which permit a high quality of life that should be valuable in attracting knowledge-based industries and their workers to the state. Furthermore, these natural assets can be better used in environmental and nature education, forming an attractive gateway to getting youngsters interested in science and to developing some valuable basic intellectual skills, such as observation, recognizing causality, and understanding complex, interacting systems. This volume provides a well-organized foundation to use in better management of our natural assets, conservation, tourism, and recreation.

This volume is foundational and will endure the test of time. It is an excellent investment, and I extend my great gratitude to the authors.

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ANNOUNCEMENT

NAME CHANGE AND EXPANDED GEOGRAPHICAL COVERAGE

With the first issue of Volume 56, this journal, which has been known as *The Michigan Botanist* since its inception in 1962, will change its name to *The Great Lakes Botanist*. At the same time, the geographical coverage will expand, and we will begin accepting papers for publication on the botany of North America north of Mexico generally. The legend, "A Journal of North American Botany" will appear on the cover, replacing the current legend, "A Journal of Great Lakes Botany."

The new name is in belated recognition of the fact that that the journal has always published research articles on the plants of the Great Lakes states and also signifies that along with the expansion of the geographical coverage to all of North America, *The Great Lakes Botanist* will nevertheless maintain the Great Lakes region as one area of special focus. The Great Lakes region is defined as the entirety of the states and provinces bordering any of the Great Lakes, that is, Michigan, Wisconsin, Minnesota, Illinois, Indiana, Ohio, Ontario, Pennsylvania, and New York. The retention of this special focus recognizes the desire of many contributors in the Great Lakes area to be able to continue publishing papers with a regional floristic focus or similar articles in a journal which has a recognized focus on the Great Lakes region. For this reason, we have chosen a name that refers to this region rather than some more general name that would reflect the greater geographical coverage Nevertheless, even while we maintain this special focus, we actively invite contributions of research articles on the botany of North America generally.

The *Great Lakes Botanist* will continue to cover a broad area of subject matter and will publish papers on all aspects of the natural history of plants of North America north of Mexico, including systematics, floristics, ecology, conservation, botanical history, economic botany and ethnobotany, restoration, and other areas of organismal botany. Plant groups include vascular plants, bryophytes, fungi, and algae.

The Great Lakes Botanist is an open access publication; its contents are available upon publication at http://quod.lib.umich.edu/m/mbot/. The journal does not currently impose page charges.

ANNOUNCEMENTS

ISOBEL DICKINSON MEMORIAL AWARD RECIPIENT

Congratulations to **Robert C. Roos**, who was the recipient of the Isobel Dickinson Memorial Award for **best student-authored paper** published in *The Michigan Botanist*, Volume 54. The selected paper was entitled "The Initial Effects of Community Variables on Sand Prairie Restoration: Species Establishment and Community Responses" by Robert C. Roos and Todd A. Aschenbach, The Michigan Botanist 54: 92–123. We acknowledge the Michigan Botanical Club–Dickinson Award Committee for evaluation of the student papers and the Michigan Botanical Foundation for funding this award.

CORRECTION

In the review of *A Field Guide to the Natural Communities of Michigan* published in Volume 55, Nos. 1–2, the second reference to the agency "Michigan Natural Features Inventory" was incorrectly printed as "Michigan Natural Resources Inventory." We regret the error.

ANNOUNCEMENT

REVIEWERS FOR 2016

I wish to thank the following people who reviewed manuscripts during 2016 for *The Michigan Botanist*. Their comments were important, both to the authors and to the editor, and their efforts, which are essential to maintaining the high quality of the journal, are greatly appreciated.

Tyler Bassett
Karl Cottenie
Garrett Crow
Mercedes Foster
Linda Graham
Charlotte Gyllenhaal
Peter C. Hoch
Emmet Judziewicz
Patrick Kociolek
Thomas G. Lammers
Santiago Lopez
Robbin Moran
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Alan Prather
Anton A. Reznicek
Michael Rotter
J. Dan Skean, Jr.
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Michael Vincent

INSTRUCTIONS TO AUTHORS

Refer to http://quod.lib.umich.edu/m/mbot/submit for more detailed instructions, especially for formatting, style conventions, literature cited, and voucher specimen requirements. Please contact the editor with any questions.

1. Create text in 12-point Times New Roman font and double space paragraphs throughout. Research articles should be organized as follows: Title, Author(s) and address(es), Abstract with up to 5 keywords, Introduction, Materials and Methods, Results, Discussion, Acknowledgements, Literature Cited, Tables, Figure Legends, and Figures. Sections may be omitted if not relevant. All pages should be numbered.

2. For noteworthy collections, manuscripts should be formatted as follows. The title, "Noteworthy Collections," should begin each submitted manuscript, followed on the next line by the State or Province for the species reported. The next line should list the taxon of interest using the following format: Species Author(s) (Family). Common name. The rest of the manuscript should include the following named sections: (i) Significance of the Report, (ii) Previous Knowledge, (iii) Discussion, (iv) Diagnostic Characters (if desired), (v) Specimen Citations, (vi) Acknowledgements (if desired), and (vii) Literature Cited. Each of these sections is largely self-explanatory; however, the "Significance of the Report" section should be limited to a brief sentence or phrase indicating the significance of the collection(s), and this may be expanded upon in the "Discussion" section; the "Specimen Citations" section should include the relevant label data from the voucher specimen(s) including location data, collector(s), collection number, etc., as well as the Index Herbariorum acronym(s) of the herbarium or herbaria where the specimen(s) are deposited. The manuscript should end with the name and address of the author(s).

3. Non-research articles, such as book reviews, letters to the editor, notices, biographies and other general interest articles can be formatted as general text without the specific sections listed above. However, literature cited and any tables or figures should be formatted as described below.

4. Create tables either as an MS Word table or using a tab-delimited format. Each table is to be submitted as a separate file. Table captions should be placed at the top of the table. Any footnotes should appear at the bottom of the table. Please do not insert tables within the body of the text.

5. Send each figure as a separate file in a high-resolution format—eps, jpg, or tif. Figures like bar graphs that gain their meaning with color won't work—use coarse-grained cross-hatching, etc. Create figure legends as a separate text file, and the typesetter will insert them as appropriate. Please do not insert the figure in the body of the text file.

6. Citations: Please verify that all references cited in the text are present in the literature cited section and vice versa. Citations within the text should list the author's last name and publication year (e. g. Smith 1990). For works with more than 2 authors, use "et al.", and separate multiple citations with a semicolon.

7. Literature Cited: List citations alphabetically by author's last name. The first author's name is to be listed with surname first, followed by initials (e.g. Smith, E. B.), and subsequent authors are to be listed with initials first.Separate author's initials with a single space. The year of publication should appear in parentheses immediately before the title of the citation. The entire journal name or book title should be spelled out. Please put a space after the colon when citing volume number and page numbers.

8. Italicize all scientific names. Voucher specimens must be cited in floristic works and in any other study whose results depend on the identity of the plant(s). Papers citing plant records without documenting vouchers are generally not acceptable.

9. Manuscripts must be submitted electronically to the email address of the editor. All manuscripts will be reviewed by at least two referees.

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On the cover: *Hypericum swinkianum* at Ober Savanna Preserve, Starke County, Indiana, July 2010, with Gerould Wilhelm. Photo by Laura Rericha